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# THE TAXA OF FOSSIL MOLLUSCA INTRODUCED BY HERMANN VON IHERING

JUAN JOSE PARODIZ
Curator Emeritus, Section of Invertebrate Zoology

## ABSTRACT

Between 1896 and 1921 Hermann von Ihering described or named 352 taxa of fossil molluscs, from genera to subspecies, and many "varieties." Most of the taxa were from southern Argentina (Patagonia), but some were from Chile, Uruguay, and Brazil. When combined with other species described by Arnold E. Ortmann in 1902, these fossils constitute the basis of our knowledge of the Tertiary malacofauna of the region. Ihering's collection was acquired in 1920 by the Museo Argentino de Ciencias Naturales, and during the 1940s the author organized and catalogued the collection of more than 900 lots.

This paper deals with Ihering's taxa and: 1) updates the taxonomic nomenclature for both genera and species; 2) indicates the correct type localities, many of which were uncertain at the time of description; 3) clarifies the stratigraphic position and geologic age of the deposits where the fossils were found; and 4) reconsiders some of Ihering's conclusions about the origin and distribution of the fauna in relation to climatic changes in the region during the Tertiary.

Ihering's stratigraphy overestimated the age of deposits. There were no intercalations between the Cretaceous and Eocene; Paleocene species were believed to be Cretaceous; marine formations of the Miocene were dated as Eocene, and so on. He also subdivided formations in order to indicate that parts of them were older. The relative ages of strata were based on the proportion of extinct species versus surviving ones. When synonyms are recognized, and many infrasubspecific names eliminated as nontaxonomic variations, such estimation is untenable.

Most of the mid-Tertiary species belong to genera that are represented in the Recent, and from zones warmer than the present climate in the Patagonian and Magellanian regions. Climatic changes were not local phenomena but the consequence of plate tectonics. Movements of plates not only changed their location, but also the orientation of the masses of land by clockwise rotation. The plates, formerly separated, united into a new continent, and rotation reversed to counterclockwise bringing them into their present position. Ihering considered them a single, unique mass, and named them Archhelenis (the northeastern part including Brasilia) and Archiplata (the southwestern part). Although land-bridge theories have been replaced by interpretations from plate tectonics, Ihering's nomenclature for the land masses is still useful and valid.

New combinations are proposed for 32 species, and lectotypes are designated for *Mactra indistincta* Ihering (1897), *Neoinoceramus ameghinoi* Ihering (1902), *Nucula tricesima* Ihering (1897), *Phacoides rocana* Ihering (1907), *Panopea thomasi* Ihering (1914), and *Potamides patagonensis* Ihering (1897). *Aturia* (*Sphenaturia*) *brueggeni* Ihering, 1921, is selected as the type species of *Sphenaturia* Ihering, 1921 (Nautilidae).

## INTRODUCTION

Between 1896 and 1921 Hermann von Ihering introduced 352 taxa of fossil Mollusca from the early Tertiary to the Pleistocene of southern South America, including genera, subgenera, species, subspecies, and infrasubspecific taxa. I had the opportunity, in 1940, of organizing this material, verifying the data, and cataloguing the more than 900 lots that constitute Ihering's collection. The present work attempts to update taxonomic nomenclature and synonymy, to clarify the stratigraphic position of strata where the fossils were found, and to indicate the correct type localities.

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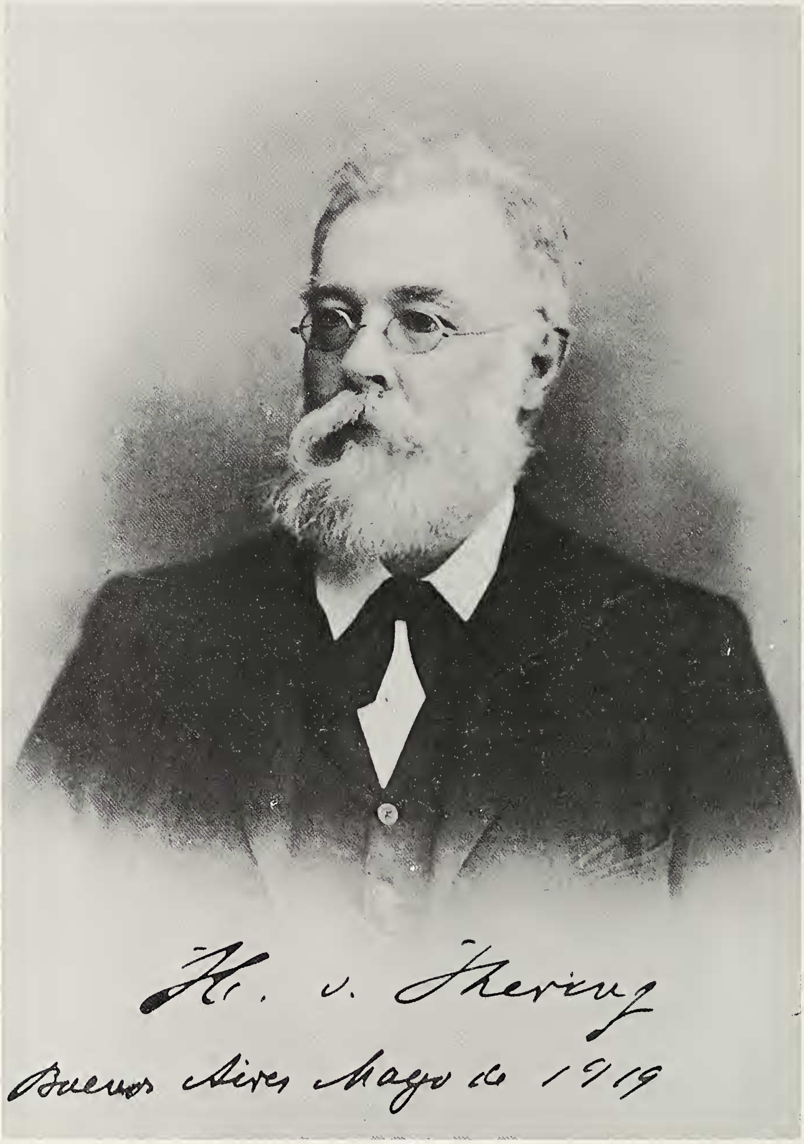

Fig. 1.—Hermann von Ihering: born 9 October 1850, died 25 February 1930.

Hermann von Ihering (Fig. 1) was born at Kiel, Germany, on October 9, 1850. He studied at Giessen, Berlin, and Göttingen, and was graduated in medicine and natural sciences. As a young naturalist he went to Italy and practiced at the Naples Zoological Station and at Messina to the south. When he returned to Germany he became an assistant to Professor C. Clauss in Göttingen, was "Privat Dozent" at Erlangen, and finally worked in Leipzig with Professor R. Leuckart. Hermann intended to make his home in the city of Henen (Geissen) by marrying a bourgeois girl, to which his father would not consent. At age 30 he was required to marry, instead, an aristocratic young lady, Anne Maria Clare von Bozel. He projected a trip to South America and his father demanded that, upon his return, he accept a promised professorship at the University of Warsaw in Poland. However, Ihering never took the position. He was already a well-known zoologist when, in 1880, he took permanent residence in Brazil, where he lived for 40 years. He was appointed "Naturalist" of the Museu Nacional at Rio de Janeiro, and later he assumed the responsibility of organizing a new museum in São Paulo, State of Rio Grande do Sul. The Museu Paulista was inaugurated under his direction. His bibliography of this period was considerable, in different branches of natural sciences, published in European journals, and also in his own *Revista do Museu Paulista.* In 1920 he was at the Museu Catharinense, in Florianopolis, Santa Catharina; by that time he had more than 300 scientific publications to his credit. His greatest dedication was to the field of malacology, not only on the taxonomy of living and fossil Mollusca, but also in anatomical research, especially on the nervous system. As early as 1876 he had defined and created the class Amphineura, and recognized the affinities of the Aplacophora to the chitons. His numerous publications on molluscan paleontology, together with A. E. Ortmann's (1902) in the Reports of the Princeton Expedition to Patagonia, laid the foundation of our knowledge of the Tertiary malacofauna of southern South America. Ihering's zoogeographic and paleogeographic studies were epitomized in "Archhelenis und Archinotis" published in Leipzig in 1907.

While residing in São Paulo, Ihering was in permanent correspondence with the Argentine paleontologist Florentino Ameghino, from whom he received the fossil materials that his brother, Carlos Ameghino, collected during 18 years of arduous travels in Patagonia. Carlos Ameghino also provided the geological information on which Florentino Ameghino based the dating of his stratigraphic series which Ihering followed. Those views, however, went through considerable modification by the middle of this century. He had supported, as had other paleogeographers of his time (including Ortmann), the theories of land bridges existing between Africa and South America prior to the Neogene (Ihering, 1900). Current tectonic concepts provide a better explanation for such paleogeographic relationships, but Ihering's nomenclature, given for land masses at the beginning of the Tertiary, is still valid.

A catalogue of the Ihering Collection (Ihering, 1914) was printed when von Ihering left the Museu Paulista in 1914 and took the collection with him (he considered the collection to be his own property). About 1919 the collection was purchased from Ihering by the Buenos Aires Museum. Each lot listed in the published 1914 catalogue was subsequently assigned a number from the Catalogue of Fossil Mollusca in the Museo Argentino de Ciencias Naturales. The numbers preceded by # in the following list are the previously unpublished numbers from that catalogue, which began with the Ihering Collection. A record of those numbers exists as annotations by Parodiz in a copy of Ihering's catalogue (1914) in the library of Carnegie Museum of Natural History (CMNH). All lots and type material were checked by Parodiz in 1940, and during the preparation of this paper in 1987 they were checked again.

During his residence in Brazil, Ihering made frequent trips to the La Plata region, keeping close connection with his collaborators. His last visit to Buenos Aires was in 1919, and it was during that period that his collection of fossils was acquired for the National Museum in that city.

When Ihering returned to Europe at the age of 70, he stayed again for a while at the Naples Zoological Station. Finally he settled in Budingen, and married his second wife Mela Buff, the same person his father had not permitted him to marry half a century before. He died on February 25, 1930.

Although Ihering's fossil collection was founded mainly on Ameghino's specimens, he also received much material from other collectors, geologists, and malacologists. Among those who contributed to the collection were A. E. Ortmann, M. Cossmann, R. A. Philippi, R. Hauthal, S. Roth, and his envoy to Patagonia in 1895, J. Bicego.

The contents of this paper were presented to the Tenth International Congress of Malacology held during August 1989 in Tübingen, Germany.

## METHODS

For the taxa listed alphabetically in this paper, the original name is given first followed by references. Then the current combination or senior synonym is given after "=" if differing from the original name, followed in some cases by junior synonyms. The family name on the right side of the citation corresponds to placement of the genus in the current combination. Holotypes are indicated only when the description was based on an original lot consisting of a single specimen. All other type materials are indicated as syntypes, since in many cases the specimen marked "type" in the collection does not coincide with the one figured in the original description, or more than one specimen is marked "type," or the type lot indicated by Ihering in the collection is not from the published type locality. There are several names where no specimen was figured and no specimen is marked as being a type. Finally, in some cases Ihering marked as "type" a better specimen received after the date of description.

In Ihering (1907*a*), species names are separated by commas from a worker's name and associated literature citation. It is therefore not possible to determine if that person and citation are the original author and description of the preceding name, or only a subsequent citation referring to that name. It was necessary to consult those citations directly in order to determine this difference.

The stratigraphical notation of Ihering is given in parentheses on the same line of the reference (usually the last where the author corrected his own earlier assignments), and in the author's original spelling (French, Spanish, or Portuguese). The relative geological age according to current knowledge is given on the line *Stratigraphy.* The catalogue numbers correspond with few exceptions to those given to the collection in the Museo Argentino de Ciencias Naturales.

There are a number of species, subspecies, or "varieties" that Ihering (1914) listed or described which were not found in the collection; in those cases, their absence is clearly stated. The date of publication for names proposed by A. D. d'Orbigny follow Parodiz (1957).

## LOCALITIES

*Alsina,* Valle. Río Negro Province, with strata of the Roca and Salamanca Formations (Paleocene), indicated by Ihering for species he described as "upper cretaceous" or "étage guaraniéen." See also Puente Alsina.

*"Baie" de San Julian.* Narrow harbor at San Julian, Santa Cruz.

*Bajada de Paraná.* Cliff below the city of Paraná, Entre Rios Province. Type section for some species from the Paraná Formation.

*Bajo de la Pava.* Lowland in the vicinity of Puerto Deseado, with "Sierra Laziar strata" (Laziarense), Araucanean Formation, Pliocene.

*Bajo de las Flechas.* Lowland near the lower section of the Río Deseado, southeast of Cerro Moro, near the coast of Santa Cruz.

*Bajo de San Julian.* See *San Julian.*

*Boquerón. Punta Boquerón.* On Bahía Inútil, Magellan Strait, Tierra del Fuego.

*Buentiempo. Cabo Buen Tiempo.* Cape Fairweather, southern Santa Cruz; locality first explored by Hatcher (1897). Perforations made by Yacimientos Petrolíferos Fiscales (Argentina Oil Bureau) 15 km W of this locality, found continental deposits at 93 m (Santa Cruz Formation), and Tertiary marine deposits at 665 m. See Feruglio, 1949–1950:279.

*Camarones, Bahía.* Bay immediately north of the Golfo San Jorge.

*Cañada de los Artilleros.* Long gorge running east from Cerro Cuadrado to the Río Chico in Santa Cruz. Yegua Quemada and Las Cuevas are localities along it.

*Cañadón Blanco.* South side of Colhue Huapi Lake, Chubut Province.

*Carmen Sylva.* Tierra del Fuego. Species of this locality are mostly of the Magellanian, and some of the Patagonian formations.

*Casamayor, Punta Casamayor.* Point on southern part of Golfo San Jorge in Santa Cruz, north of Mazaredo. In geopaleontological bibliography sometimes spelled, *Casa-Maior* or *Casamajor.*

*Cerro Bagual* or *Cerro de los Baguales.* North of the Río Sehuen Valley west of Mata Amarilla, Santa Cruz. Thick deposits of the Salamanca Formation. Do not confuse with Sierra Baguales which is in south-central Santa Cruz.

*Chapadmalal.* Creek and town south of Mar del Plata, Buenos Aires Province.

*Chico River, Río Chico* of Chubut Province. Tributary of Chubut River running northeast from Colhue Huapi Lake, eastern Chubut Province.

*Chico River, Río Chico* of Santa Cruz. Tributary of Río Sehuen running southeast.

*Chocoi, Punta Chocoi.* On Magellan Strait at Carelmapu, Chile.

*Colhue Huapi.* Lake and locality in southeast Chubut Province, east of Lake Muster.

*Colloncura, Río.* Tributary of the Limay River in southern Neuquen Province.

*Corral Foyel.* Locality on the Andean zone of Nahuel Huapi, along the Foyel River and Foyel Lake. First explored by the geologist Santiago Roth in 1897–98, and later by R. Hauthal (1898).

*Deseado, Puerto Deseado, Port Desire.* South of Golfo San Jorge, at the mouth (or *ria*) of Deseado River in Santa Cruz.

*Deseado Island.* An early Tertiary island in the San Jorge Sea, practically separating northern and southern parts of that sea during the Paleocene.

*Fairweather, Cape.* See Buentiempo.

*Foyel, Rio, Lago.* See Corral Foyel.

*Foz de Santa Cruz.* In Ihering (1914); mouth (or *ria*) of Santa Cruz River.

*General Roca.* Roca in the geopaleontological literature. Town in the upper Río Negro Valley, east of the junction with Río Limay, which was earlier known as "Fresno Menuco," Río Negro.

*Homo Viejo* [sic]. Error for Horno Viejo, near Roca, Río Negro.

*Jahuel* or *Jaguel.* Below the east slope of Sierra Auca Mahuida and Bajo del Palo, south of Río Colorado, Neuquen Province; type section for many species from Paleocene fresh-water deposits.

*Jack Harvey.* South of Monte Observación and south of Coyle, Santa Cruz.

*Jegua Quemada.* See Yegua Quemada.

*La Cueva or Las Cuevas.* Six mi S of the mouth of Río Santa Cruz and north of Río Coyle, near Yegua Quemada, and east of Monte León.

*Laziar, Sierra Laziar.* 50 km NW of Puerto Deseado, Santa Cruz; type section for species from deposits of the Araucanean Formation, Pliocene.

*Lele* or *Leleque.* Creek in northwest Chubut Province, at the base of Sierra Leleque, halfway between ñorquinco and Esquel.

*Luján.* Old city on the Luján River, 100 mi N of Buenos Aires. Pleistocene deposits.

*Maiten, Maiten Valle.* Río Negro Province.

*Malaspina.* 25 km W of Bahía Bustamante, northern part of Golfo San Jorge, Chubut Province.

*Mata Amarilla.* On the north slope of Cerro del Castillo and 20 km E of Park-Aik, Santa Cruz.

*Monte Cazador* (Capas with *Lahillia luisa*). A number of marine species were described by Wilckens from this locality that were confused with the strata of Salamanca (Paleocene); these are Upper Cretaceous.

*Monte Espejo.* Marine terrace located near San Julian, Santa Cruz, north of Río Seco and 50 km S of Bahía Laura.

*Monte León.* South of the mouth of Río Santa Cruz, 5 mi inland from Punta León, Santa Cruz.

*Monte Observación.* Hill between mouth of Río Santa Cruz and Puerto Coig.

*Owen Point.* Collecting locality on coast of Santa Cruz, named by Hatcher.

*Pan de Azucar.* Promontories north of the lower Río Chico Valley, near Gaiman, with Paleocene to Miocene strata, Chubut.

*Park-Aik* or *Pari-Aike.* Name of an *estancia* (ranch) that was located 20 km W of Mata Amarilla, along the Río Sehuen, Santa Cruz.

*Piedra Clavada.* A "torreon" or tower produced by eolic erosion of sandstones from the Sehuenan beds, in the Río Sehuen Valley; west of Kohuel Kaike on the railroad between Puerto Deseado and Colonia Las Heras, Santa Cruz.

*Puente Alsina.* South of Buenos Aires city. Perforation found Miocene strata of the Paraná Formation at a depth of 80 m.

*Puerto Militar*: now *Puerto Belgrano.* Naval base in southwest Buenos Aires Province at Bahía Blanca. The vicinity is the type section for species of the marine Belgrano Formation, early Pleistocene.

*Pueyrredón, Lago.* Lake in western Santa Cruz, on the border between Argentina and Chile.

*Punta Atlas.* Point midway between Rawson and Camarones, Chubut.

*Punta Nodales.* On the Golfo San Jorge, 20 km N of Comodoro Rivadavia, Chubut Province.

*Punta Nueva, Nava, Nova.* Point between Bahía Mazaredo and Bahía Bustamante, Golfo San Jorge, Santa Cruz.

*Rada Tilly.* Harbor near Comodoro Rivadavia, Golfo San Jorge.

*Salamanca, Pico.* Peak on the Golfo San Jorge, near Bahía Solano, Santa Cruz, between Puerto Viser and Punta Matalinares. Marine Paleocene strata.

*San Julian, Bajo de San Julian.* Southern Santa Cruz lowlands. Typical strata of the Lower Patagonian Formation (Juliense).

*Santa Cruz.* Santa Cruz Province. Port at the mouth of the Santa Cruz River. Ihering's references to Santa Cruz for fossils of different strata are not always clear; it may be the locality of that name or some other place in Santa Cruz Province (a Territory at the time).

*Santa María da Bocca do Monte.* Rio Grande do Sul, Brazil.

*Sehuen Aik.* Near Mata Amarilla, on the Valley of Río Sehuen, Santa Cruz. Sometimes referred to by Ihering as Sehuen-Ark.

*Sehuen River* (also called Chalia). Runs from the vicinity of Lago Viedma in Santa Cruz to become a tributary of the Río Chico. The name Chalia was applied for its vicinity to an *estancia* (ranch) of that name near Mata Amarilla.

*Shell Gap.* A locality mentioned by Ortmann (1902) and named by Hatcher, on the upper section of Río Chico in Santa Cruz, near El Portezuelo.

*Tres Puntas.* Cape south of Golfo San Jorge, near Deseado, Santa Cruz.

*Valcheta, Travesia.* Area along the Gualicho River in western Río Negro.

*Villarino, Punta Villarino.* On Peninsula Valdéz, Chubut.

*Yegua Quemada.* North of, and very close to, La Cueva, a few miles south of the mouth of the Santa Cruz River, east of Monte León.

## STRATIGRAPHIC UNITS

### Upper Cretaceous

### *Senonian–Chubutian*

*Strata with* Lahillia luisa *(Pehuenche–Pehuenchense).*—The complex of Upper Cretaceous deposits, including the *Lahillia luisa* beds, were known to early authors as Chubutiano or Chubutense. According to E. Feruglio (1949–1950) that complex of sediments in southern Patagonia reaches a thickness of 2300 m. Geologists recognize that a considerable hiatus exists between the Senonian and the marine deposits of the Paleocene. The fauna of invertebrates at the end of the Cretaceous showed more global geographic relationships with a complete change in the deposits of the Eocene, with no species affinities. In Ihering's time, the concept of the Paleocene was not yet developed, and the Cretaceous–Tertiary boundary was not established. Marine strata now known as Paleocene were included in the Cretaceous. Even early in this century, authors such as Wichmann (1927) and Windhausen (1918; 1931, in part), parallelled Roca and Salamanca formations with the strata containing *Lahillia luisa.*

Until near the end of the Cretaceous the conditions in the Patagonian region were of continental character. Then epirogenical movements began and continued into the early Tertiary, especially in the area now corresponding to the Golfo San Jorge, which was transformed into a great basin (Feruglio, 1949–1950:17).

### Tertiary

### *Paleocene*

*Guaranitic.*—Ihering, Ameghino, and other early writers on Patagonian stratigraphy used the name "formación guaranitica" for a complex of strata corresponding globally to the Paleocene–Eocene, derived from d'Orbigny's (1842) "Tertiarie Guaranien," "Formación Guaranitica" of Döring (1881–1882), and "Guaranitic Beds" of Hatcher (1897). Other authors included it in the "Pehuenche" (Upper Cretaceous). These sediments contain *Ostrea guaranitica* Ihering (= *Exogyra guaranitica* [Ihering]), *Corbula sehuena* Ihering (= *Eriphyla sehuena* [Ihering]), and *Potamides patagonensis* Ihering; it is recognized as a brackish-water unit of the Paleocene of the Sehuen Valley of Santa Cruz. See Sehuen Formation.

*Roca Formation (Rocanense).*—The marine deposits of Ihering's (1903) Rocanéen, or Rocanense of other authors, were named after the type locality, the village of General Roca on the left bank of the Río Negro, Río Negro Province. The Roca beds represent the earlier Tertiary ingression of the San Jorge Sea in its northern section. Ihering maintained that the marine Roca was of Upper Cretaceous age. Windhausen (1916) was the first to report that the "Roca horizon corresponds probably to the lowest part of the Tertiary." While the malacofauna of Roca (and Salamanca) appears as a precursor of the subsequent Tertiary marine faunas, and differs from that of the Upper Cretaceous, it contains some characteristic old elements, such as *Odontogryphaea rostrigera* (Ihering), *Odontogryphaea rocana* (Ihering) (= *Odontogryphaea rothi* [Böhm, 1903]), and *Ampullina* (*Pseudotylostoma*) *romeroi* (Ihering).

*Río Chico Formation.*—This continental formation, named and defined by G. G. Simpson (1933), contains the oldest Patagonian mammal fauna. Land molluscs are very rare (*Thaumastus patagonicus* Parodiz), but the consideration of the strata is important for correlations with marine and fresh-water strata of the Paleocene. It overlies, and is in part coeval with, the marine Salamanca, but the beginning of the Río Chico sedimentation was most probably Danian; its recognized base is laterally equivalent to the Sehuen beds (Montian) and developed considerably during the Thanetian.

*Jahuel Formation.*—Windhausen (1918) designated this formation as "Capas de Jahuel" strata of that locality, near the eastern slope of Sierra Mahuida, south of the Colorado River in Neuquen. The greater development is in Río Negro, near Roca (Windhausen also called it "lower Roca"). It corresponds to the "Senonian lacustre" of Wichmann (1927) and in part to the Jahuelense of Feruglio (1949–1950). By mechanics of deposition it fills the eroded depressions of Roca, and sometimes is parallel to Río Chico. The deposits are fresh-water, and correlative to the southern brackish-water Sehuenan.

The fresh-water fossils of Jahuel are abundant. The species belong to genera that appear for the first time in Patagonia, some still living such as *Diplodon* and *Cyanocyclas* (= *Neocorbicula*), or extinct such as *Paleoanculosa.* They indicate a migration from the Northern Hemisphere that was correlated with that of the early mammals of Patagonia.

*Salamanca Formation.*—This is the southern facies of the San Jorge Sea, as Roca was of the north. It is frequently referred to in the literature as Salamanque[i]ano or Salamanquéen. Although both Salamanca and Roca began in the Danian, Salamanca lasted longer into the Montian with greater development. The type section is at Salamanca Peak near the coast of the Golfo San Jorge, Santa Cruz. Feruglio (1949–1950) found the strata underlying the Río Chico Formation, with brackish-water intercalations of the Sehuenan in situations that represent deltaic environments, and with thin layers containing fossil plants indicating transition to the continental conditions that prevailed during the Eocene. Although there is a notable hiatus between the fauna of the Paleocene and the beginning of the Patagonian Formation in the Lower Miocene, there are a number of related species.

Stenzel (1945) still considered Roca and Salamanca as a single mid–upper Paleocene unit. Lithologically the facies are distinguishable: Salamanca sediments are clay and sandstone, and those of the Roca are mostly limestone.

Feruglio (1949–1950:307) identified 67 forms of marine invertebrates which are exclusive to the Salamanca. Ihering described 14 species that occur in the Salamanca Formation, among which *Gryphaea pyrotheriorum* and *Odontogryphaea rostrigera* also occur in the Roca Formation.

*Sehuen Formation (Piso Sehuense).*—The "Piso Sehuense" or Sehuenéen was first reported by Ameghino as coeval with Roca, later placed above it, and finally (Ameghino, 1906) below Roca–Salamanca. The sequence given by Ihering (1907*a*) was (still considering it Cretaceous): "Pyrotherienne" (now Deseado Formation, base of the Oligocene); disconformity; "Sehuenéen" (now Paleocene, Montian–Thanetian).

The sediments were localized along the Sehuen, also called Chalia River, Santa Cruz. It represents the lateral brackish water of the terrestrial Río Chico Formation, equivalent of what Jahuel is to Roca in the north. It corresponds to the phase of regression of the San Jorge Sea, and the brackish-water *Potamides* and *Eriphyla* are found mixed with *Ostrea* and *Struthiolaria.*

*Boca–Levu.*—These early marine deposits of the Tertiary of Chile are placed between Paleocene and Eocene (Feruglio, 1949–1950:230, 231).

### *Eocene*

*Casamayor Formation.*—This is the "capas with *Notostylops*" or Notostylopense in the nomenclature of Ihering and Ameghino. Defined by Simpson (1933), it overlies the Río Chico Formation and at its beginning was lateral to the regression of the San Jorge Sea. Its age is Lower Eocene, and together with the Muster Formation above, was called a unit by most geologists, the "Sarmiento group," or "tuffs with mammals." Molluscs are few but characteristic: *Strophocheilus chubutensis* Ihering, *Strophocheilus hauthali* Ihering (= *Megalobulimus hauthali* [Ihering]), *Paleobulimulus eocenicus* Parodiz, and *Chilina stenostylops* Parodiz, all found in the upper section of the complex (Parodiz, 1949*a*).

### *Oligocene*

*Magellanian Formation.*—This consists of marine deposits in the southern part of Santa Cruz Province, designated by Hatcher (1897, 1900) as the Magellanian beds, Lower Oligocene. Ihering placed it between the Santa Cruz and the Patagonian formations, but actually it is underlain by both. It represents the beginning of the great marine ingression that continued in the north in the Lower Miocene (the Patagonian Formation). According to Feruglio (1949–1950), who conducted extensive research, the age of the Magellanian must be between the middle and the end of the Oligocene. The separation of the Magellanian and Patagonian is geographical rather than stratigraphical, even if the Patagonian is younger as a whole. In Tierra del Fuego, the Strata of Boquerón at Bahía Inútil are, at their base, equivalent with the Magellanian, but also part of them belong to the Patagonian Formation. A number of forms described by Ihering for the Magellanian (*Glycymeris cuevensis, Turritella ambulacrum sylva, Venericardia sylva,* and *Cominella fueguensis*) were found also in the Patagonian Formation and the Navidad beds of Chile. The greater age assigned by Hatcher for the Magellanian (Lower Oligocene) is probably correct.

*Queguay Formation.*—This is the "Calizas de Queguay" (Queguay Limestone), the oldest Tertiary deposits known from Uruguay, lying in disconformity over the Asencio sandstones (Upper Cretaceous) and below the Fray Bentos clay (Miocene). Chronologically they are coeval with the Magellanian, and correspond to the lacustrine–eolic system with *Strophocheilus, Paleoanculosa,* and "*Planorbis*" *waltheri.* These strata are found mainly on the Queguay River Valley, north of Paysandú.

### *Miocene*

*Santa Cruz Formation.*—This vast terrestrial sedimentation began to develop north and lateral to the Upper Magellanian, and continued coeval to the Patagonian Formation, finally overlying it. Ihering (1897*a*) referred the marine fauna he described to the Santacruzense, and in 1907 indicated its relative position to be above, but mostly coeval, with the Patagonian that he considered to be at the Eocene–Oligocene boundary (Ihering, 1907*a*). Feruglio (1949–1950) found it filling also the eroded surfaces of the Patagonian, beginning with the Lower Miocene and progressing upwards thereafter. Its extension into the middle Miocene forms a hiatus between the marine faunas of the Patagonian and the Río Negro formations.

In contrast with the molluscan contents of the Paleocene and Eocene continental formations, no land or fresh-water shells are known from the Santa Cruz Formation. The absence is impressive compared with the abundant fluvio–terrestrial malacofauna in Peruvian, Ecuadorian, and Colombian deposits of the same age (Pilsbry and Brown, 1917; Bristow and Parodiz, 1982).

*Lower Miocene Marine Deposits.*—Three large marine ingressions, the Oligocene Magellanian, the transition from Upper Oligocene to the early Miocene Patagonian, and the Navidad beds of Chile, covered a vast area. Between the northeastern part of the Patagonian Sea on the coast of Chubut, and the Navidad beds in the northwest, there was a triangular, uncovered peninsula of large dimensions. To the south, the sea covered all the territory down to Tierra del Fuego, intercalated with some areas of terrestrial sedimentation (Santa Cruz Formation).

*Patagonian Formation.*—D'Orbigny (1842) gave the name of "Tertiaire Patagonien" to all the deposits of marine sedimentation from the north at Paraná, to the south in Patagonia. Above it he placed the "Argile Pampienne" (Pliocene–Pleistocene), and below the "Tertiaire Guaranien." The classification of the sedimentary complex used by Ihering (1897*b*) when he described a large number of fossil Mollusca was the same dichotomy that Ameghino had made the same year: Patagonian and Superpatagonian formations. He also correlated the Patagonian with the terrestrial Santa Cruz Formation, placing both in the Eocene. Thus, most of the species were indicated as being from the "Form. Santacruzense" and, as it is explained in the appendix (Ihering, 1897*b*:317–319), distinguished from the Patagonian Formation which he considered to be relatively older, Upper Eocene. In his larger work of 1907(*a*) he named all these deposits in a global sense as "Pan-Patagonian" in which he established some chronological levels: above was the Superpatagonian made coeval with the Santa Cruz Formation, and better represented at localities such as La Cueva and Yegua Quemada; the middle was occupied by the Monte León strata (Leonense) and the San Julian (Juliense); at the base were the strata of Bahía Camarones (Camaronense) or "Patagonéen inférieur." Such divisions were based only on the relative relationship between the paleontological contents and living species.

Many of the taxa named by Ihering were subspecific or infrasubspecific. The clarification of the taxonomy, as well as the recognition of many synonyms, makes his stratigraphic classification untenable, apart from the fact that the Eocene in Patagonia was predominantly a continental sedimentation. Ortmann (1902), studying the fossils from Hatcher's expedition to Patagonia, concluded that the Patagonian Formation was indivisable and entirely Miocene. Finally, the paleontologist George G. Simpson (1932, 1933, 1935, 1940, 1941), and the geologist Egidio

Feruglio (1933, 1935, 1949, 1950) maintained that the Patagonian Formation cannot be older than Lower Miocene. But very probably the sedimentation, at its base, began as early as the Upper Oligocene, and as such these strata were indicated by modern authors (Del Río and Morra, 1984; Erdmann and Morra, 1985; Morra, 1985) as the San Julian Formation (Ihering's Juliense), and sometimes even older in age. Since the older marine Oligocene is represented by the Magellanian Formation, the base of the Patagonian cannot be older than Upper Oligocene. However, the paleontological contents of the Patagonian (*sensu lato*) in their majority, even those included in the lower level, show features that are characteristically Lower Miocene. In the stratigraphic indications of our list of species, the age is given as such for the Patagonian Formation, although in many cases they belong to the Juliense (such as those materials from the Cañada de los Artilleros). Actually the fauna of the earlier Patagonian Formation is transitional between Upper Oligocene and Lower Miocene. The Navidad beds of Chile are synchronic with the Patagonian Formation.

The Patagonian Formation contains the richest of the Tertiary marine malacofaunas of South America. Feruglio (1949–1950) estimated 325 recognizable species: 153 bivalves, 168 gastropods, four scaphopods, and one cephalopod. Ihering described many species from the Patagonian Formation that belong to genera that today represent elements of warmer climate in the northern zone. Among these are *Abra, Lucina, Sanguinolaria, Aporrhais, Tibia, Laevicardium, Macoma,* and *Glycymeris.* The absence of these and many other genera in the malacofauna of Recent Patagonian and Magellanian regions reflects displacement by plate tectonics rather than "local" changes in temperature.

*Collon–Cura Beds (Colloncurense).*—These are terrestrial and in part freshwater sediments in the western part of the Chubut Province. Kraglievich (1930) named it "Formación Friaseana" (from Lake Frias) and considered the strata as Oligocene. Simpson (1940) and Feruglio (1949–1950) placed the Collon–Cura in the Middle or Upper Miocene, above the Santa Cruz and Patagonian formations. Molluscs are rare: *Diplodon rothi* Ihering.

*Fray Bentos Formation (Fray Bentos Clay).*—This consists of strata in Uruguay, on top of the Queguay limestone (Oligocene) and below (hiatus) the Camacho Formation (Pliocene).

*Paraná Formation (Paranense of Authors; Also Known as Mesopotamian).*—This consists of rich marine sediments in northeastern Argentina. The type section is located in the vicinity of Paraná city, Entre Rios Province, and also found in deep perforations in Buenos Aires and Uruguay. It contains many molluscan genera that denote tropical or semitropical conditions. Authors differed about its age which was indicated as old as Oligocene and as young as Pliocene, but the actual position is in the Upper Miocene. It contains a larger number of extinct species than the next formation, the Araucanean, which is Pliocene.

In Uruguay, the Paraná Formation is particularly represented in the Department of Colonia, where it is known as the Camacho Formation (sandstone), correlated by Caorsi and Goñi (1958:59) to the "Transgresión marina entreriana" but given the age of Pliocene. Also, fossils found at Punta Gorda on the Uruguay River are the same as those from perforations at Chuy on the Atlantic coast which are Miocene in age.

Ihering used the name "Formación Entreriana" as did several other authors. However, the name "Entreriense" or "Entreriano of Patagonia" was also applied to its chronological equivalent in Río Negro, the "Rionegrense" or Río Negro

Formation. More difficult to define is the Araucano–Entreriano complex under which Kraglievich (1930), Simpson (1940), and others united the "Paranense," the "Rionegrense," and the Araucanean formations.

*Río Negro Formation (Rionegrense).*—The "Rionegrense" was equal to what some authors called the "Entreriense" of northern Patagonia. The type section is Puerto Piramides in Golfo Nuevo, Chubut. There are similarities between the faunas of the Río Negro and Paraná formations. It is relatively younger than Paraná, and corresponds to a later, southern ingressive phase of the Paraná Sea, which marks the boundary between the Miocene and Pliocene, although distinguishable from the Pliocene Araucanean. It has in common with the Paraná Formation species of *Dosinia* and *Lucina,* but the fauna is generally poorer with some characteristic species such as *Amusium cossmanni* Ihering. Of the 52 species known from the Río Negro beds, 23 are exclusive and 26 were known in the Lower Miocene, showing faunistic continuity with chronological changes along the mid-Tertiary Patagonian strand.

### *Pliocene*

*Fairweather Beds (Fairweatheriense or Buentiempense).*—This stratigraphic unit was reported by Hatcher (1897) for the Miocene of southern Santa Cruz. According to Feruglio (1949–1950) it belongs to the Upper Pliocene. It appears coeval with northern deposits at Chapadmalal as an upper section of the Araucanean complex.

*Araucanean Formation.*—The "Araucano" is a complex of sediments first observed by Charles Darwin in December 1833 and January 1834. Döring (1881–1882) named it "Tehuelche" of which the larger part belonged to the Pleistocene. It consists of continental sediments and marine terraces of extensive development in the provinces of Chubut and Santa Cruz, particularly at Sierra Laziar (see Feruglio, 1933).

*Sierra Laziar Strata (Laziarense).*—Most of the fossil Mollusca named by Ihering from the "Araucano" are from Sierra Laziar. Although it contains a good number of extinct species, it shows the transition from the ancient to the Recent fauna; some species or subspecies named by Ihering from this strata are synonyms of Recent ones: *Pupilia aperta tehuelcha* Ihering = *Fissurellidea megatrema* d'Orbigny; *Neomphalius princeps* Ihering = *Tegula patagonica* (d'Orbigny); *Trophon necocheanus* Ihering = *Trophon lamellosus* (Gmelin); *Trophon inornatus gradatus* Ihering = *Trophon varians* (d'Orbigny); *Trophon varians montenus* Ihering = *Trophon varians* (d'Orbigny); *Chione vindex* Ihering = *Protothaca antiqua* (King); *Marcia scutata tehuelcha* Ihering = *Samarangia exalbida* (Chemnitz).

## Quaternary

### *Pleistocene*

*Belgrano Formation (Belgranense).*—This is the first marine ingression of the Pleistocene. It is also known as the "Pampeano marino" of other authors. The sedimentation in the north was coeval with the terrestrial Buenos Aires Formation; the intercalations reveal the oscillation of the Atlantic strand. Geographically it is divided into two sections: Belgrano North, with greater development in Buenos Aires Province with almost all of the species still living; Belgrano South, in southern Santa Cruz, which contains the same species found in the Belgrano

North. The southern section was also called "Deseadense," but that term was used by Kraglievich (1930) and other authors for a different stratigraphic unit of terrestrial deposits.

*Buenos Aires Formation (Bonaerense).*—This formation consists of very extensive eolic sedimentation, synchronic and alternating with the Belgrano Formation on the coast. It is very poor in land shells: *Peronaeus* (*Lissoacme*) *ameghinoi* (Ihering), *Strophocheilus charruanus* (Frenguelli). In Uruguay, the same coeval deposits are known as "Loess of Arazati."

*Querandí Formation (Querandino).*—This is the latest of the marine ingressions at the end of the Pleistocene. It was of very short duration but its deposits are found farther inland than Belgrano, up the Paraná River, and of great development in Uruguay where the Belgrano beds are absent. The Querandí Formation coincided with the tectonic movement that produced the great fault of the Paraná, and subsequent marine regression formed the La Plata estuary. It contains species that now live north of that estuary, such as *Diplodon charruanus lujanensis* Ihering (= *Diplodon delodontus* [Lamarck]) in some fresh-water intercalations. In Uruguay it is also known, in part, as the "Clays of Vizcaino."

## TERTIARY CLIMATE AND PALEOGEOGRAPHIC CONSIDERATIONS

Ihering's important contribution to the geopaleontological history of South America was the introduction of the concept of different land masses that he named Archhelenis, Archiplata, and Archinotis (Ihering, 1907*b*). These ideas were elaborated two decades earlier than Wegener's 1916 presentation of his continental drift theory (Wegener, 1924).

Of Archhelenis, which in Ihering's paleogeography united Africa with South America, he said (Ihering, 1907*a*:483), "Le continent qui unissait le Brésil à l'Afrique, commencait à disparaître pendant la formation crétacée." That indicates that his idea of Archhelenis was not just of a bridge but of a continent. That same year (Ihering, 1907*b*) he epitomized and developed his ideas in the book "Archhelenis und Archinotis"; in it he illustrated Brasilia and Archiplata united to Africa by Archhelenis, even projecting it into the Indian Ocean in a mass of land of tremendous proportions.

Actually Brasilia was the same as Archhelenis, or part of it, and its tectonic plate had been separated from Africa long before the Cretaceous. It was a large mass of land between the northern sea, Tethys, and the southern, Nereis. Ancient faunistic elements of Gondwanian origin developed into new groups by isolation in Archhelenis. Families which later became the Mycetopodidae and the Strophocheilidae in South America are good examples.

West of Archhelenis was Archiplata, separated by a long, narrow sea. Up to the early Tertiary Archiplata was connected to Archinotis (Antarctica), and the land, with Patagonia at the center, extended as far north as Peru. During the Paleocene there suddenly appeared a large fauna of mammals, fresh-water molluscs, and elements of other zoological groups that were closely related to those of the Cretaceous of North America. The migration must have taken place through some connection between northern and southern regions of the Western Hemisphere. The connection was interrupted during the entire Tertiary and the southern faunas developed in isolation. There is also evidence of identical, or very closely related, species discovered in mid-Tertiary sediments of Antarctica and Patagonia. These are littoral molluscs that indicate a common continental shelf existing between the two regions and a similarity in climatic conditions. Because of the subtropical, sometimes tropical, character of the Tertiary marine malacofauna, Ihering assumed that important climate changes had taken place and that the composition of the faunas was affected sometimes by barriers, sometimes by migrations.

A. E. Ortmann supported the Archhelenis–Archiplata proposition, although he strongly disagreed with Ihering about the age of the Patagonian deposits. After Ortmann's (1902) and Ihering's (1907*a*, 1907*b*) paleontological work, when geologists began to combine their ideas with new concepts of plate tectonics, still they interpreted, as Wegener did in his continental drift theory, the displacement of the South American continent westward as if it had been a solid and unified mass, instead of being formed of different plates originally separated, that included also Archiguiana.

The mechanics of plate tectonics displaced Archiplata in a clockwise direction toward a west–northwest position relative to that which the continent occupies today. It remained connected with Antarctica which was also in lower latitudes. In such position, the east coast of Archiplata was facing more to the south than at present. The gyration must have advanced the tip of the continent to latitude 30–35°S. After the middle Tertiary, the movement of the "pendulum" turned counterclockwise until reaching the Recent position with its tip at latitude 56°S. These oscillating movements explain the climate changes that affected the marine as well as the fresh-water faunas, and their distribution.

The author who first proposed the rotation theory was H. Modell (1950). After many years of studying the taxonomy and geographic distribution of the superfamilies Unionacea and Mutelacea in relation to climate, Modell arrived at a logical conclusion. Modell's schematic illustration (1950:143) seems somewhat exaggerated, but it is supported by many biogeographic facts related to the changes in climate that occurred between the Tertiary and Recent in South America.

The unification of Archhelenis–Archiplata began as early as the first phase of the Andean orogeny on the Andean syncline, but a communication between the Pacific and the new Atlantic Ocean still existed in the Miocene, and probably until the Pliocene. The same gyration that modified the position of the South American continent separated Antarctica, its plate drifting south.

## ABBREVIATIONS

| | |
|---|---|
| ACM | Annals of Carnegie Museum, Pittsburgh. |
| AJS | American Journal of Science. |
| AMNBA | Anales del Museo Nacional de Buenos Aires. |
| ARMGB | Anali del Reale Museu Geologico di Bologna. |
| ASCA | Anales de la Sociedad Científica Argentina. |
| BGSA | Bulletin of the Geological Society of America. |
| BSGF | Bulletin de la Société Geologique de France. |
| BIGU | Boletín del Instituto Geologico del Uruguay, Montevideo. |
| CMNH | Carnegie Museum of Natural History, Pittsburgh. |
| CZMHN | Comunicaciones Zoologicas del Museo de Historia Natural de Montevideo. |
| ICZN | International Commission on Zoological Nomenclature. |
| MACN | Museo Argentino de Ciencias Naturales, Buenos Aires. |

| | |
|---|---|
| NDMG | Nachrichtsblätter Deutsche Malakozoologische Gesellschaft, Frankfurt. |
| NJMGP | Neues Jahrbuch für Mineralogie, Geologie, und Paläontologie, Stuttgart. |
| NPRMP | Notas Preliminares da Revista do Museu Paulista, São Paulo. |
| PAPS | Proceedings of the American Philosophical Society. |
| RMLP | Revista del Museo de La Plata, Argentina. |
| RMP | Revista do Museu Paulista, São Paulo. |

## List of New Combinations

*abavus* Ihering, 1907. *Neomphalius* TROCHIDAE
= *Tegula abava* (Ihering), **new combination**

*ameghinoi* Ihering, 1907. *Cucullaria.* ARCIDAE
= *Barbatia ameghinoi* (Ihering), **new combination**

*ameghinoi* Ihering, 1896. *Voluta* VOLUTIDAE
= *Adelomelon ameghinoi* (Ihering), **new combination**

*americanus* Ihering, 1907. *Neomphalius* TROCHIDAE
= *Tegula americana* (Ihering), **new combination**

*burmeisteri* Ihering, 1907. *Cymbiola* VOLUTIDAE
= *Adelomelon burmeisteri* (Ihering), **new combination**

*camaronesia* Ihering, 1907. *Arca* ARCIDAE
= *Anadara camaronesia* (Ihering), **new combination**

*cannada* Ihering, 1907. *Cymbiola becki* "var." VOLUTIDAE
= *Adelomelon cannada* (Ihering), **new combination, new status**

*chicoana* Ihering, 1907. *Hadriania jorgensis* "var." MURICIDAE
= *Trophon chicoanus* (Ihering), **new combination, new status**

*chubutiana* Ihering, 1907. *Scalaria* EPITONIIDAE
= *Epitonium chubutianum* (Ihering), **new combination**

*contorta* Borchert, 1901. *Modiola* HYRIIDAE
= *Diplodon contortus* (Borchert), **new combination**

*dalli* Ihering, 1907. *Lyria* VOLUTIDAE
= *Enaeta dalli* (Ihering), **new combination**

*dautzembergi* Ihering, 1897. *Triton* (*Argobuccinum*)
RANELLIDAE: RANELLINAE
= *Fusitriton dautzembergi* (Ihering), **new combination**

*elegans* Ortmann, 1900. *Urosalpinx* MURICIDAE: OCENEBRINAE
= *Ocenebra elegans* (Ortmann), **new combination**

*jorgensis* Ihering, 1907. *Hadriania* MURICIDAE: OCENEBRINAE
= *Crassilabrum jorgensis* (Ihering), **new combination**

*juliana* Ihering, 1907. *Arca* ARCIDAE
= *Anadara juliana* (Ihering), **new combination**

*major* Ihering, 1899. *Cancellaria gracilis* "var." CANCELLARIIDAE
= *Naronia major* (Ihering), **new combination, new status**

*monoceros* Ihering, 1907. *Trophon* MURICIDAE
= *Thais monoceros* (Ihering), **new combination**

*multicoronatus* Ihering, 1907. *Vermetus* VERMETIDAE
= *Dendropoma multicoronatus* (Ihering), **new combination**

*patagonica* Ihering, 1897. *Bulla* ?RETUSIDAE
= *Retusa patagonica* (Ihering), **new combination**

*paucispina* Ihering, 1897. *Pholas* PHOLADIDAE
= *Netastoma paucispina* (Ihering), **new combination**

*pyrotheriana* Ihering, 1907. *Polynices* NATICIDAE
= *Lunatia pyrotheriana* (Ihering), **new combination**

*quemadensis* Cossmann, 1899. *Cirsotrema* EPITONIIDAE
= *Opalia quemadensis* (Cossmann), **new combination**

*rada* Ihering, 1907. *Lotorium* (*Lampusia*) RANELLIDAE: CYMATIINAE
= *Semitriton rada* (Ihering), **new combination**

*rocana* Ihering, 1907. *Phacoides* LUCINIDAE
= *Lucina rocana* (Ihering), **new combination**

*rocanum* Ihering, 1907. *Cardium* (*Hemicardium*) CARDIIDAE
= *Trachycardium rocanum* (Ihering), **new combination**

*salobris* Ihering, 1907. *Cyrena* CORBICULIDAE
= *Cyanocyclas salobris* (Ihering), **new combination**

*santacruzense* Ihering, 1914. *Cardium* CARDIIDAE
= *Laevicardium santacruzense* (Ihering), **new combination**

*santacruzensis* Ihering, 1907. *Chenopus* APORRHAIDAE
= *Drepanocheilus santacruzensis* (Ihering), **new combination**

*schucherti* Ihering, 1914. *Gibbula* ARCHITECTONICIDAE
= *Architectonica schucherti* (Ihering), **new combination**

*stromeri* Ihering, 1914. *Fusus* RANELLIDAE: RANELLINAE
= *Fusitriton stromeri* (Ihering), **new combination**

*tridentata* Ihering, 1897. *Cuculearia* [sic] ARCIDAE
= *Barbatia tridentata* (Ihering), **new combination**

*usurpator* Ihering, 1907. *Lotorium* (*Lampusia*) RANELLIDAE: CYMATIINAE
= *Cymatium usurpator* (Ihering), **new combination**.

## LIST OF TAXA

***abavus,*** 1907. *Neomphalius* TROCHIDAE
1907*a*. AMNBA, 14:134, pl. 4, fig. 9a–b.
1914. NPRMP, 1(3):76 (Patagonico Inferior).

= *Tegula abava* (Ihering), **new combination.**

*Type Locality.*—Southeast of Punta Nova, Golfo San Jorge, Santa Cruz.

*Syntypes.*—#591, five specimens, coll. Ameghino, 1900.

*Stratigraphy.*—Lower section of the Patagonian Formation (Lower Miocene).

*Remarks.*—The shell is higher than in the living *T. patagonica* (d'Orbigny) and therefore more similar to *Calliostoma.*

***aequistriata,*** 1907. *Gibbula cuevensis* "var." ARCHITECTONICIDAE
1907*a*. AMNBA, 14:132. Not figured; diagnosis only.
1914. NPRMP, 1(3):73 (Patagonico Superior).

= *Valdesia dalli* (Ihering).
*Type Locality.*—Cabo Tres Puntas, Golfo San Jorge, Santa Cruz.
*Syntypes.*—#573, two specimens, coll. Ameghino, 1900.
*Other Lots.*—#574, southeast of Punta Nova, one specimen, coll. Ameghino, 1900; #575, Punta Casamayor, two specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***ameghinoi,*** 1908. *Bulimulus* ORTHALICIDAE: BULIMULINAE

1908. AMNBA, 17:429 (not figured).
1944. Parodiz, CZMHN, 1(17):1–3, pl. 1, fig. 1–6.

= *Peronaeus* (*Lissoacme*) *ameghinoi* (Ihering).
*Type Locality.*—Chapadmalal, Buenos Aires Province.
*Type.*—Not in the collection.
*Stratigraphy.*—Buenos Aires Formation (Pleistocene).
*Remarks.*—*Bulimulus sporadicus pampa* Ihering is also a synonym.

***ameghinoi,*** 1897. *Cancellaria* CANCELLARIIDAE

1897*b*. RMP, 2:310, pl. 3, fig. 2, and pl. 4, fig. 15.
1907*a*. AMNBA, 14:215. *Admete ameghinoi.*
1914. NPRMP, 1(3):112.

= *Admete ameghinoi* (Ihering).
*Type Locality.*—Yegua Quemada, Santa Cruz.
*Syntypes.*—#900, four specimens, coll. Ameghino, 1893.
*Stratigraphy.*—Patagonia Formation (Lower Miocene).
*Remarks.*—This species resembles the living *Admete magellanica* Strebel.

***ameghinoi,*** 1907. *Cardium* CARDIIDAE

1907*a*. AMNBA, 14:292, pl. 11, fig. 72a–b.
1914. NPRMP, 1(3):47 (Patagonico Inferior).

*Type Locality.*—Santa Cruz.
*Holotype.*—#391, one valve, coll. J. Bicego, 1897 (by monotypy).
*Other Lot.*—#392, Punta Nova, one specimen, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***ameghinoi,*** 1907. *Cucullaria* ARCIDAE

1907*a*. AMNBA, 14:233, text fig. 8.
1914. NPRMP, 1(3):16 (Patagonico Inferior).

= *Barbatia* (*Cucullaria*) *ameghinoi* (Ihering), **new combination.**
*Type Locality.*—Pan de Azucar at San Julian, Santa Cruz.
*Holotype.*—#99, one valve, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***ameghinoi,*** 1907. *Lutraria* MESODESMATIDAE

1907*a*. AMNBA, 14:26, pl. 3, fig. 17a–b.

*Type Locality.*—Roca, Río Negro.
*Type.*—Not in the collection.
*Stratigraphy.*—Roca Formation (Paleocene).

*Remarks.*—There is an unnumbered specimen in the collection, but not listed in the 1914 catalogue. The illustration is unlike *Lutraria* and resembles a mesodesmatid.

**ameghinoi,** 1897. *Modiola* MYTILIDAE

1897*b*. RMP, 2:233, pl. 6, fig. 43.
1902. Ortmann, p. 21, pl. 25, fig. 2. *Modiolus.*
1907*a*. AMNBA, 14:275. *Modiolus ameghinoi.*
1914. NPRMP, 1(3):38 (Patagonico Inferior and Superpatagonico).

= *Modiolus ameghinoi* (Ihering).

*Syntypes.*—#316, two valves, coll. Ameghino, 1893.

*Other Lots.*—#317, southeast of Punta Nova; #318, Santa Cruz, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species was reported by Wilckens (1911) from the Antarctic at Seymour Island. This species resembles *Mytilus pseudochorus* Doello-Jurado, 1922.

**ameghinoi,** 1902. *Neoinoceramus* MYTILIDAE: MYTILINAE

1902*b*. PAPS, 41(6):134, pl. 19, fig. 3–4.
1907*a*. AMNBA, 14:243, fig. 10.
1914. NPRMP, 1(3):20 (Patagonico Inferior).

*Type Locality.*—Southeast of Punta Nueva.

*Lectotype.*—#136, an intact minor valve, corresponding to the figures in the original description, here designated.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Lot #136 in the Ihering Collection consists of two specimens from Golfo San Jorge, southeast of Punta Nueva. Only one specimen is listed in the catalogue (Ihering, 1914:20) and is a fragment of the paralectotype. It is a single complete large valve, 20 cm long, coll. Ameghino, 1900. Although listed in the catalogue it does not correspond to fig. 3–4 in the original description (Ihering, 1902*b*). The other specimen in Lot #136 is the lectotype designated above, and is not listed in the 1914 catalogue.

**ameghinoi,** 1907. *Myochlamys centralis* "var." PECTINIDAE

1897*b*. RMP, 2:229, pl. 8, fig. 49. *Pecten centralis.*
1902. Ortmann, 2:114, pl. 21–22, fig. 1a–c (*Pecten proximus*); 2:116, pl. 23, fig. 1a–b (*Pecten centralis*).
1907*a*. AMNBA, 14:253 (Patagonico). *Myochlamys centralis.*

= *Chlamys centralis* Sowerby, 1846.

*Type Locality.*—Santa Cruz.

*Holotype.*—#241, specimen received from Ortmann as *P. proximus* (by monotypy).

*Other Lot.*—#240, Yegua Quemada, six valves, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**ameghinoi,** 1902. *Ostrea* OSTREIDAE

1902*a*. AMNBA, 4:114, fig. 4–7.
1903. AMNBA, 9:213.

1907*a*. AMNBA, 14:44 (Salamanquéen).
1914. NPRMP, 1(3):23 (Formación Guaranitica with *Gryphaea pyrotheriorum*).

*Type Locality.*—West of Río Chico, Chubut.
*Syntypes.*—#165, one complete specimen and 16 valves.
*Other Lot.*—#166, Puerto Malaspina, three valves; no indication of collector.
*Stratigraphy.*—Salamanca Formation (Paleocene).
*Remarks.*—See *Ostrea rocana* Ihering.

**ameghinoi,** 1897. *Struthiolaria* STRUTHIOLARIIDAE

1897*b*. RMP, 2:289, text fig. 14.
1900. Ortmann, p. 380. *Struthiolaria chilensis* (not *S. chilensis* Philippi, 1887).
1904. Cossmann, p. 104, pl. 8, fig. 3–4. *Struthiolaria ornata* (not *S. ornata* Sowerby, 1846).
1907*a*. AMNBA, 14:172.
1914. NPRMP, 1(3):95 (Superpatagonico).

*Type Locality.*—Originally "La Cueva and Santa Cruz."

*Syntypes.*—#763, Yegua Quemada, designated by Ihering (1914) as "Type lot," 12 specimens, coll. Ameghino.

*Other Lots.*—#764, Cañada de los Artilleros, coll. Ameghino, 1900; #765, Santa Cruz; #766, Santa Cruz.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Two lots were received from Ortmann: #765 as *S. chilensis* Philippi, and #766 as *S. densestriata* Ihering.

**ameghinoi,** 1903. *Turritella* TURRITELLIDAE

1903. AMNBA, 9:213, pl. 2, fig. 14.
1907*a*. AMNBA, 14:48.
1914. NPRMP, 1(3):89 (Salamanqueano).

*Type Locality.*—Río Chico, Chubut.
*Holotype.*—#717, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Salamanca Formation (Paleocene).

**ameghinoi,** 1896. *Voluta* VOLUTIDAE

1896. NDMG, 7:97.
1897*b*. RMP, 2:302, text fig. 17.
1899*b*. Cossmann, p. 125, fig. 18. *Cymbiola.*
1902. Ortmann, p. 233.
1907*a*. AMNBA, 14:209. *Cymbiola.*
1914. NPRMP, 1(3):109 (Superpatagonico).

= *Adelomelon* (*Pachycymbiola*) *ameghinoi* (Ihering), **new combination.**

*Type Locality.*—La Cueva, Santa Cruz.

*Holotype.*—#883a, coll. Ameghino (by monotypy).

*Other Lots.*—#884, La Cueva, a very large specimen, coll. Ameghino; #885, Rada Tilly, San Jorge, one specimen, coll. Ameghino; #886, Golfo San Jorge, one specimen, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Specimen #295 differs from typical *ameghinoi,* being more globose and without tuberculae. This species is ancestral to *A.* (*P.*) *feruglioi* (Doello-Jurado, 1931) from the Pliocene and the living *A.* (*P.*) *brasiliana* (Solander, 1786).

***Ameghinomya*, 1907.** VENERIDAE

1907*a*. AMNBA, 1907:71, 306. New subgenus.

= *Protothaca* Dall, 1902.

*Type Species.*—*Chione argentina* (Ihering, 1897*b*).

*Stratigraphy.*—Patagonian Formation (Lower Miocene) and Paraná Formation (Upper Miocene).

*Remarks.*—Close to *Chione* and according to Ihering represented only in the Patagonian, but poorly defined. Although Ihering mentioned *Protothaca* in relation with other forms (see *Chione cossmanni*), he did not compare *Ameghinomya* with *Protothaca.* See *Venus volckmanni argentina.*

***ameghinorum*,** 1907. *Venericardia* ?ARCIDAE

1907*a*. AMNBA, 14:23, pl. 3, fig. 13a–b.
1914. NPRMP, 1(3):42 (Roca).

= ?*Noetia ameghinorum* (Ihering).

*Type Locality.*—Roca, Río Negro.

*Holotype.*—#340, an artificial cast received from Florentino Ameghino in 1904 which corresponds to the figured specimen (by monotypy).

*Stratigraphy.*—Roca Formation (Paleocene).

*Remarks.*—This species has high umbos anteriorly produced and probably belongs to *Noetia*; unlikely a *Venericardia.*

***americanus*,** 1907. *Neomphalius* TROCHIDAE

1907*a*. AMNBA, 14:134, pl. 4, fig. 7a–b.
1914. NPRMP, 1(3):76 (Superpatagonico).

= *Tegula* (*Promartynia*) *americana* (Ihering), **new combination.**

*Type Locality.*—Cañada de los Artilleros, Santa Cruz.

*Holotype.*—#592, coll. Ameghino, 1900 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The shell is high, *Calliostoma*-like but with an umbilicum "circonscrit en dehors par una crete spirale," as in the subgenus *Promartynia* Dall, 1909.

***archipatagonica*,** 1907. *Urosalpinx* MURICIDAE

1897*b*. RMP, 2:297. *Trophon leucostomoides* (not *Triton leucostomoides* Sowerby, 1846).
1907*a*. AMNBA, 14:189, pl. 6, fig. 35.
1914. NPRMP, 1(3):98 (Superpatagonico).

= *Ocenebra* (*Ocinebrina*) *elegans* (Ortmann), **new combination.**

*Type Locality.*—La Cueva, Santa Cruz.

*Holotype.*—#795, coll. Ameghino, 1900 (by monotypy).

*Other Lot.*—#796, Yegua Quemada, one specimen, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This is a more elongate species than the Recent *Urosalpinx rushi* (Pilsbry).

***archiplata*** "Ihering," 1931. *Bulimus* STROPHOCHEILIDAE

1931. Walther, p. 31, given as "*B. archiplata* Ihering" *in litteris. Nomen nudum.*

= *Strophocheilus charruanus* (Frenguelli, 1930).

*Remarks.*—See Klappenbach and Olazarri (1966:234) and Parodiz (1969:172, pl. 18, fig. 2).

***arenasia,*** 1907. *Bulla* BULLIDAE

1907*a*. AMNBA, 14:339. New name for *Bulla remondi* in Ortmann (1899:431) and Ortmann (1902: 245, pl. 37, fig. 7a–b), not *Bulla remondi* Philippi, 1887.

*Type Locality.*—The specimen figured by Ortmann (1902) is from Punta Arenas, Chile.
*Stratigraphy.*—Magellanian Formation (Lower Oligocene).

***arenophila,*** 1907. *Macrocallista* VENERIDAE

1907*a*. AMNBA, 14:349. New name for *Meretrix iheringi* in Ortmann (1902:142, pl. 28, fig. 5a–b), not *Meretrix iheringi* Cossmann, 1898.

= *?Amiantis arenophila* (Ihering).
*Type Locality.*—In Ortmann (1902): Punta Arenas, Chile.
*Stratigraphy.*—Magellanian Formation (Lower Oligocene).

***argentina,*** 1897. *Turritella* TURRITELLIDAE

1897*b*. RMP, 2:286. Not figured (Form. Patagonica).
1907*a*. AMNBA, 14:162. *Turritella ambulacrum argentina.*
1914. NPRMP, 1(3):88. *Turritella ambulacrum argentina.*

= *Turritella ambulacrum* Sowerby, 1846. The different "varieties" of *T. ambulacrum*—*T. a. steinmanni, T. a. pyramidesia,* and *T. a. argentina*—are all the same species.
*Type Locality.*—Río Santa Cruz, Santa Cruz.
*Syntypes.*—Not in the collection.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—The type lot with 17 specimens as reported by Ihering (1914) is not in the collection. The other lot, #709, is a conglomerate.

***argentina,*** 1897. *Venus volckmanni* "var." VENERIDAE

1897*b*. RMP, 2:252, pl. 7, fig. 45.
1904. RMLP, 11:231. *Venus argentina.*
1907*a*. AMNBA, 14:291, 385. *Chione* (*Ameghinomya*) *argentina.*
1914. NPRMP, 1(3):55 (Superpatagonico).

= *Protothaca argentina* (Ihering).
*Type Locality.*—Santa Cruz.
*Syntypes.*—Not in the collection as listed in Ihering (1914).
*Other Lots.*—#460, Rada Tilly, two specimens, coll. C. Ameghino, 1900; #461, Trelew, Chubut, a fragment, coll. S. Roth (from "formação entreriana"); #462, Sierra de los Baguales, three casts, coll. Hauthal, 1897; no number, Santa Cruz, one specimen, coll. J. Bicego, 1897.
*Stratigraphy.*—Patagonian Formation (Lower Miocene) and Paraná Formation (Upper Miocene).
*Remarks.*—*Venus paranensis* Borchert, 1901:38, pl. 3, fig. 16–18, from Paraná, Entre Rios, is a synonym. E. Feruglio also found it in the Patagonian of Cerro Otto.

**argentinus,** 1907. *Actaeon* ACTAEONIDAE

1907*a*. AMNBA, 14:117, pl. 4, fig. 2.
1914. NPRMP, 1(3):68 (Superpatagonico).

*Type Locality.*—Cañada de Los Artilleros, Santa Cruz.
*Syntypes.*—#545, two specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**Austrocominella,** 1907. BUCCINIDAE: PHOTINAE

1907*a*. AMNBA, 14:190, 344. New subgenus.

*Type Species.*—*Cominella fueguensis* Ihering.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Subgenus, "intermediaire entre *Cominella* s.s. et *Ptychosalpinx.*" *Cominella sensu stricto* and other subgenera are from New Zealand; *Ptychosalpinx* is known only from the Miocene of North America.

**bagualesia,** 1907. *Panopaea* [sic] HIATELLIDAE

1907*a*. AMNBA, 14:325, pl. 13, fig. 86a–b.
1914. NPRMP, 1(3):63.

= *Panopea bagualesia* Ihering.
*Type Locality.*—Sierra de los Baguales, Santa Cruz [given by Ihering (1914) as Chubut in error].
*Holotype.*—#511, one cast with part of the shell, coll. Hauthal, 1897 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Feruglio (1949–1950) reported the species from Río Turbio.

***Barnea*** sp. PHOLADIDAE

1914. NPRMP, 1(3):65.

= ?*Cyrtopleura lanceolata* (d'Orbigny, 1846).
*Specimens.*—#522, one cast, from la Paz, Entre Rios, coll. S. Roth.
*Stratigraphy.*—Paraná Formation (Upper Miocene).
*Remarks.*—Similar to *Barnea ornata* Borchert, 1901:45, pl. 4, fig. 3.

**bellicosum,** 1907. *Calliostoma* TROCHIDAE

1907*a*. AMNBA, 14:439, pl. 17, fig. 117.
1914. NPRMP, 1(3):77 ("Post-Pampeano").

= *Calliostoma militaris* Ihering.
*Type Locality.*—Puerto Militar (now Puerto Belgrano), Prov. Buenos Aires.
*Syntypes.*—#597, three specimens, coll. Ameghino, 1905.
*Stratigraphy.*—Belgrano Formation (Pleistocene). Recent: Rio de Janeiro to Prov. de Buenos Aires.
*Remarks.*—Clench and Turner (1960:23) listed this species as a synonym of *Calliostoma jucundum* (Gould), but it is actually *C. militaris*; the descriptions of the two species are almost identical.

**bicegoi,** 1899. *Lotorium* RANELLIDAE: CYMATIINAE

1899*a*. NJMGP, 2:29, pl. 1, fig. 8.
1907*a*. AMNBA, 14:177 (Patagonico).

1914. NPRMP, 1(3):97. *Lotorium (Sassia) bicegoi.*

= *Cymatium bicegoi* (Ihering).
*Type Locality.*—Santa Cruz.
*Syntypes.*—#790, two specimens, coll. J. Bicego.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Of this and other species of "*Lotorium,*" Ihering (1907*a*:174) said that he did not know the correct stratigraphic position; however, he mentioned Upper Eocene (unlikely) and Superpatagonian.

***boehmi,*** 1907. *Venericardia iheringi* "var." CARDITIDAE

1907*a*. AMNBA, 14:23. Not figured.

= *Venericardia iheringi* Böhm, 1903.
*Type Locality.*—Roca, Río Negro.
*Type.*—Not in the collection under this name.
*Stratigraphy.*—Roca Formation (Paleocene).

*Remarks.*—The two specimens "plus ventru, moins hault" were included in 1914 in the lot of *Venericardia iheringi* (#355); Ihering added: "Peut-etre c'est une variation individuelle."

***borcherti,*** 1907. *Tritonidea* BUCCINIDAE: PISANIINAE

1907*a*. AMNBA, 14:369. New name for *Turbinella subcraticulata* d'Orbigny *in* Borchert (1901:50, pl. 5, fig. 1–2), not *T. subcraticulata* d'Orbigny.

*Type Locality.*—Paraná, Entre Rios (Borchert).
*Stratigraphy.*—Paraná Formation (Upper Miocene).

*Remarks.*—The genus *Tritonidea* Swainson, 1840, for this species was suggested to Ihering by W. H. Dall.

***brüggeni*** [sic], 1921. *Aturia (Sphenaturia)* NAUTILIDAE

1921. Physis, Buenos Aires, 5:76. Not figured.

= *Aturia (Sphenaturia) brueggeni* Ihering.
*Type Locality.*—Punta Boquerón, Bahía Inútil, Tierra del Fuego.
*Holotype.*—Status unknown.
*Stratigraphy.*—"Estratos de Boquerón" (below Patagonian Formation).

*Remarks.*—Referring to the holotypes of this species and *A. (S.) felschi,* Ihering (1921) stated, "Los ejemplares tipicos quedan depositados en este Museo [Museo Argentino de Ciencias Naturales, Buenos Aires]." This species is the type of the subgenus *Sphenaturia* Ihering. Feruglio (1949–1950) places it below the Patagonian.

***bullia,*** 1907. *Melania* PLEUROCERIDAE

1907*a*. AMNBA, 14:464, pl. 18, fig. 127.
1914. NPRMP, 1(3):93 (Salamanqueano).

= *Paleoanculosa bullia* (Ihering), see Parodiz, 1969:125, pl. 12, fig. 7–9; pl. 14, fig. 2; pl. 10, fig. 2–4, 6.
*Type Locality.*—Río Chico, Chubut.
*Holotype.*—#753, coll. Ameghino (by monotypy); deposited in CMNH.
*Stratigraphy.*—Colhue Huapi Formation (Colhuehuapian; Thanetian–Montian, ? Paleocene).

*Remarks.*—*Melania pehuenchensis* Doello-Jurado (1927:415; see Wichmann, 1927:fig. 77) and *M. ameghiniana* Doello-Jurado (1927:413; see Wichmann, pl. 10, fig. 61–71, and pl. 11, fig. 74) are synonyms of *P. bullia* (Ihering). The holotype was received by Parodiz (1969:pl. 14, fig. 2) in exchange from Dr. Max Birabén, at that time Director of the Museo Argentino de Ciencias Naturales.

***burckhardti,*** 1903. *Cardita* CARDITIDAE

1903. AMNBA, 9:205. New name for *Cardita morganiana* in Burckhardt (1902:216), not *Cardita morganiana* Rathbun, 1875.

*Type Locality.*—Malargue, near Roca, Río Negro.
*Type.*—No material described by Burckhardt is in the collection.
*Stratigraphy.*—Roca Formation (Paleocene).
*Remarks.*—Specimens from Roca were misidentified by Burckhardt (1902) as *Cardita morganiana* Rathbun, but that species is from the Maria Farinha Formation in Brazil.

***burckhardti,*** 1907. *Dosinia* VENERIDAE

1907*a*. AMNBA, 14:26. New name for *Dosinia brasiliensis* Burckhardt, 1902:216, pl. 4, fig. 8–12, not *D. brasiliensis* White, 1887.
1914. NPRMP, 1(3):50 (Crétacée Supérieur).

*Type Locality.*—Roca, Río Negro.
*Type.*—No material described by Burckhardt is in the collection.
*Stratigraphy.*—Roca Formation (Paleocene).

***burckhardti,*** 1903. *Turritella* TURRITELLIDAE

1903. AMNBA, 9:208, pl. 1, fig. 9.
1907*a*. AMNBA, 14:38.
1914. NPRMP, 1(3):90. *Turritella doeringi* Böhm (Crétacée Supérieur).

= *Turritella doeringi* Böhm, 1903.
*Type Locality.*—Roca, Río Negro.
*Syntypes.*—#729, three casts, coll. Santiago Roth.
*Stratigraphy.*—Roca Formation (Paleocene).

***burmeisteri,*** 1907. *Cymbiola* VOLUTIDAE

1897*b*. RMP, 2:303. *Voluta dorbignyana* Philippi.
1899*a*. NJMGP, 2:33. *Voluta dorbignyana* Philippi.
1902. Ortmann, p. 230, pl. 36, fig. 1 (*V. d'orbignyana*), and p. 232, fig. 37a–b (*V. domeykoana*, not *domeykoana* Philippi).
1907*a*. AMNBA, 14:210. *Cymbiola burmeisteri* Ihering.
1914. NPRMP, 1(3):109–110. *Cymbiola* (*Cymbiola*) *burmeisteri* Ihering and *Cymbiola* (*Miomelon*) *orbignyana* [sic] Philippi (Patagonico).

= *Adelomelon burmeisteri* (Ihering), **new combination.**
*Type Locality.*—Santa Cruz.
*Syntypes.*—#880, two specimens plus four casts, Bicego Collection; #881, Sierra de los Baguales, one complete specimen, coll. Hauthal.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Ortmann's figures (1902) of *V. dorbignyana* and *V. domeykoana* are similar, and those on pl. 36, fig. 1b, d, e, are juveniles. Figures 1a–1b in Ortmann (1902) are *Adelomelon* (*Pachycymbiola*) *pilsbryi* (Ihering). See *Voluta pilsbryi* Ihering.

**burmeisteri,** 1907. *Dosinia* VENERIDAE

1907*a*. AMNBA, 14:301, text fig. 13a–b.
1914. NPRMP, 1(3):50 (Patagonico Inferior).

= *Dosinia* (*Dosinella*) *burmeisteri* (Ihering).

*Type Locality*.—Bajo de San Julian, Santa Cruz.

*Holotype*.—#416, one valve, coll. Ameghino, 1900 (by monotypy).

*Stratigraphy*.—Patagonian Formation (Lower Miocene).

*Remarks*.—According to Dall (in consultation with Ihering), this species belongs to the subgenus *Dosinella*.

**burmeisteri,** 1907. *Psammobia* PSAMMOBIIDAE

1907*a*. AMNBA, 14:312, pl. 11, fig. 81a–b.
1914. NPRMP, 1(3):57 (Patagonico Inferior).

= *Gari burmeisteri* (Ihering).

*Type Locality*.—Camarones, Chubut.

*Syntypes*.—#477, only three valves in the collection from the six reported by Ihering (1914).

*Stratigraphy*.—Patagonian Formation (Lower Miocene).

*Remarks*.—E. Feruglio (1949–1950) reported the species from Río Turbio.

**burmeisteri,** 1907. *Tellina* TELLINIDAE

1907*a*. AMNBA, 14:27, pl. 3, fig. 16.

*Type Locality*.—Roca, Río Negro.

*Type*.—Not in the collection.

*Stratigraphy*.—Roca Formation (Paleocene).

*Remarks*.—Ihering (1907*a*) states, "Seulement un moule interne." The figured internal cast appears to be of the subgenus *Strigilla* Turton, 1832, and close to *S. carnaria,* a Recent species ranging from Florida to Bahía Blanca, Argentina. Ihering did not compare this species with living ones because he thought it was from the Cretaceous.

**cahuillensis,** 1907. *Turritella* TURRITELLIDAE

1907*a*. AMNBA, 14:342. New name for *Turritella affinis* in Hupé, 1854:155 (pl. 2, fig. 7), preoccupied by *Turritella affinis* Müller, 1851, stated by Ihering to be a Cretaceous species.
1914. NPRMP, 1(3):90 ("Terciario de Chili").

*Type Locality*.—Curaumulli, Valparaiso, Chile.

*Syntypes*.—#727, received from the Valparaiso Museum, three specimens, are possible syntypes.

*Stratigraphy*.—Tertiary.

*Remarks*.—I have not been able to locate a reference for Müller, 1851, as given in Ihering (1907*a*:342). It is possible that Ihering never saw original descriptions for *T. affinis* Müller or *T. affinis* Hupé, and his use of the latter name was based on a questionable identification in Philippi (1887:71). In any event, the name *cahuillensis* reflects the type locality of that name, given by Hupé (1854:155) as Inseln Chiloé, Cahuil, Colchagua. Ihering (1897*b*:289) indicated that Moericke and Steinmann (1896:555) identified a specimen as *T. affinis* Philippi, and without explanation stated his belief that the species was probably the same as *T. affinis* Hupé. This conclusion appears consistent with later placement of "*Turritella af-*

*finis* R. A. Philippi (*nec* Hupé)" as a synonym of *T. cahuillensis* (Ihering, 1914: 90). Without study of original descriptions and type materials, it is not possible to determine the correct synonymy for specimens identified by various authors as *T. affinis.*

***callophyla,*** 1903. *Exogyra* OSTREIDAE

1903. AMNBA, 9:199. Not figured.
1907*a*. AMNBA, 14:10, 144.
1914. NPRMP, 1(3):20 (Cretáceo Superior, Roca).

*Type Locality.*—Roca, Río Negro.

*Holotype.*—#138, one specimen (by monotypy).

*Other Lots.*—#139, Roca, two complete specimens and five valves, coll. Ameghino, 1907; #140, Río Negro, one specimen, coll. Ameghino, "Cretáceo horizonte mais inferior."

*Stratigraphy.*—Roca and Salamanca formations.

*Remarks.*—Feruglio found the species in the Salamancan beds north of Colhue Huapi in the lower valley of the Río Negro in Chubut (Paleocene). Burckhardt (1902:215) referred to it as *Exogyra lateralis* Nilsson; the original *lateralis* of Nilsson is not an *Exogyra,* but a *Gryphaea.*

***camaronesia,*** 1907. *Arca* ARCIDAE

1907*a*. AMNBA, 14:238, text fig. 9.
1914. NPRMP, 1(3):18 (Patagonico Inferior).

= *Anadara camaronesia* (Ihering), **new combination.**

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#104, 34 valves, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The specimen figured in Ihering (1907*a*) is a juvenile, similar to *Anadara brasiliana* (Lamarck).

***camaronesia,*** 1907. *Crenella divaricata* MYTILIDAE

1907*a*. AMNBA, 14:277, text fig. 11a–b.
1914. NPRMP, 1(3):39 (Patagonico Inferior).

= *Crenella camaronesia* (Ihering).

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#323, 12 valves, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—It differs from *Crenella divaricata* (d'Orbigny), a Recent species ranging from North Carolina to Argentina, by being narrower and more squamose. This species resembles *Crenella duplisensis* Dall of the Tertiary of Florida.

***camaronesia,*** 1907. *Diplodonta villardeboaena* [sic] "var." UNGULINIDAE

1907*a*. AMNBA, 14:290. Not figured.
1914. NPRMP, 1(3):47.

= *Diplodonta vilardeboaena* (d'Orbigny, 1846).

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#390, three valves, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Taras* Risso, *nomen dubium* (= *Diplodonta*).

***camaronesia,*** 1907. *Glycimeris* [sic] GLYCYMERIDIDAE

1907*a*. AMNBA, 14:240, pl. 7, fig. 52a–b.
1914. NPRMP, 1(3):18 (Patagonico Inferior).

= *Glycymeris camaronesia* Ihering.

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#121, four large valves (five smaller valves mentioned in Ihering [1914] missing from the collection), coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***camaronesia,*** 1907. *Leda* NUCULANIDAE

1907*a*. AMNBA, 14:230, pl. 7, fig. 50a–b.
1914. NPRMP, 1(3):14 (Patagonico Inferior).

= *Nuculana* (*Saccella*) *camaronesia* (Ihering).

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#80, one complete specimen (Ihering listed four) plus 22 isolated valves, coll. Ameghino, 1900; #81, south of Colhue Haupi, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Leda* Schumacher, 1817 (= *Nuculana* Link, 1807).

***camaronesia,*** 1907. *Tellina patagonica* "var." TELLINIDAE

1907*a*. AMNBA, 14:315. Not figured.
1914. NPRMP, 1(3):58 (Patagonico Inferior).

= *Tellina patagonica* Ihering.

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#487, two valves; coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The syntype valves differ from each other and represent variation in *T. patagonica.*

***camaronesia,*** 1907. *Tornatina* SCAPHANDRIDAE [CYLICHNIDAE]

1907*a*. AMNBA, 14:119, pl. 4, fig. 3.
1914. NPRMP, 1(3):68 (Patagonico Inferior).

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#547, ten specimens, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***camaronesia,*** 1907. *Turritella breantiana* "var." TURRITELLIDAE

1907*a*. AMNBA, 14:164, pl. 4, fig. 23.
1914. NPRMP, 1(3):89 (Patagonico Inferior).

= *Turritella breantiana* d'Orbigny, 1847.

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#719, 15 specimens, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This form was among those reported by Ihering (1899*a*) as *T. breantiana indecussata.* Although both are of the same strata, *T. camaronesia* is found only north of the San Jorge Gulf, while *indecussata* is more abundant south of it.

***camaronesia*,** 1907. *Venericardia* CARDITIDAE

1902. Ortmann, p. 128, fig. 8a–c. *Cardita patagonica* (not *C. patagonica* Sowerby, 1846).
1907*a*. AMNBA, 14:28, pl. 10, fig. 69a–d (Patagonico Inferior).

*Type Locality.*—Camarones, Chubut.
*Syntypes.*—#349, 100 valves, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***camaronesium*,** 1907. *Calliostoma* TROCHIDAE

1907*a*. AMNBA, 14:137, pl. 4, fig. 11. (Only one figure is on plate 4; text says "a–b.")
1914. NPRMP, 1(3):77 (Patagonico Inferior).

*Type Locality.*—Camarones, Chubut.
*Holotype.*—#598, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Ihering compared this species with *Calliostoma santacruzense* Ortmann, but it is more similar to *C. cossmanni* Ortmann.

***cannada*,** 1907. *Cymbiola becki* "var." VOLUTIDAE

1907*a*. AMNBA, 14:211, pl. 6, fig. 42a–b.
1914. NPRMP, 1(3):109 (Superpatagonico).

= *Adelomelon* (*Adelomelon*) *cannada* (Ihering), **new combination; new status.**
*Type Locality.*—Cañada de los Artilleros, Santa Cruz.
*Holotype.*—#879, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This species is ancestral to the living *A.* (*A.*) *becki* (Broderip) and *A.* (*A.*) *barattini* Klappenbach and Ureta, 1966.

***cannada*,,** 1907. *Venericardia* CARDITIDAE

1907*a*. AMNBA, 14:287, pl. 10, fig. 71a–b.
1914. NPRMP, 1(3):42 (Superpatagonico).

*Type Locality.*—Cañada de los Artilleros, Santa Cruz.
*Syntypes.*–#344, 38 valves, coll. Ameghino, 1900; #345, Pan de Azucar, one valve, coll. Ameghino, 1900; #346, Bajo San Julian, two valves, coll. Ameghino, 1900; #347, La Cueva, seven valves, coll. Ameghino, 1900; #348, Yegua Quemada, 15 valves, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***cannada*,** 1907. *Volvulella* RETUSIDAE

1907*a*. AMNBA, 14:119, pl. 4, fig. 4.
1914. NPRMP, 1(3):69 (Superpatagonico).

*Type Locality.*—Cañada de los Artilleros, Santa Cruz.
*Syntypes.*—#549, two specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This species resembles the Recent species *V. persimilis* (Mörch) which ranges from North Carolina to Uruguay.

***capa,*** 1907. *Ostrea hemisphaerica* [sic] "var." OSTREIDAE

1907*a*. AMNBA, 14:12. Not figured.
1914. NPRMP, 1(3):22. *Ostrea neuquena capa* (Rocanense).

= *Ostrea neuquena* Ihering.
*Type Locality.*—Roca, Río Negro.
*Syntypes.*—#157, five valves, plus three complete.
*Stratigraphy.*—Roca Formation (Paleocene).
*Remarks.*—There are no *Ostrea hemispherica* d'Orbigny in the collection. See *Ostrea hemisphaerica* [sic] "var." *paca* Ihering.

***caroloameghinoi,*** 1902. *Aturia* NAUTILIDAE

1902*b*. PAPS, 41(69):134, pl. 19, fig. 1–2.
1907*a*. AMNBA, 14:116; "*caroli-ameghinoi.*"
1914. NPRMP, 1(3):68 (Patagonico Medio).

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.
*Holotype.*—#544, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene); also in the "Estratos de Boquerón," Tierra del Fuego.

***carolodarwini,*** 1907. *Polynices* NATICIDAE

1907*a*. AMNBA, 14:89. *Nomen nudum*; see *Natica tumbeziana* Ihering.

***casa,*** 1907. *Chione* VENERIDAE

1907*a*. AMNBA, 14:308, pl. 12, fig. 78.
1914. NPRMP, 1(3):55 ("Casa-Maior," Patagonico Inferior).

= *Protothaca antiqua* (King, 1832).
*Type Locality.*—Punta Casamayor, Santa Cruz.
*Holotype.*—#456, coll. Ameghino, 1900 (by monotypy).
*Other Lot.*—#457, Travesia Valcheta, coll. C. Burmeister, one fragment.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This is the oldest geological record of the Recent *P. antiqua.*

***chalcedonica,*** 1903. *Cytherea* VENERIDAE

1903. AMNBA, 9:216, pl. 2, fig. 18a–b.
1907*a*. AMNBA, 14:48. *Meretix chalcedonica.*
1914. NPRMP, 1(3):51 (Salamanquéen). ["Posição systematica dubiosa"].

*Type Locality.*—Colhue Huapi, Chubut.
*Syntypes.*—#422, three valves, crystalized into chalcedony.
*Stratigraphy.*—Salamanca Formation (Paleocene).
*Remarks.*—This species is neither a *Cytherea* nor a *Meretrix*; it most likely belongs in *Pitar.*

***chicoana,*** 1907. *Hadriania jorgensis* "var." MURICIDAE

1907*a*. AMNBA, 14:186, pl. 6, fig. 33a–b.
1914. NPRMP, 1(3):99 (Patagonico Inferior).

= ?*Trophon chicoanus* (Ihering), **new combination.**
*Type Locality.*—Río Chico, Chubut.

*Holotype.*—#806, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Differs from *Nucella jorgensis* (*Hadriania* in Ihering, 1907*a*) and does not belong in that genus.

**chicoanus,** 1907. *Vermetus* VERMETIDAE

1907*a*. AMNBA, 14:167. New name for *Vermetus* cf. *intortus* in Ortmann (1902:198, pl. 32, fig. 1), not *Serpula intorta* Lamarck, 1818.

= ?*Petaloconchus chicoanus* (Ihering).
*Type Locality.*—Río Chico, Chubut (Ortmann, 1902). Also from Lake Pueyrredón.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—*Vermetus intortus* (Lamarck) is a European species currently placed in *Petaloconchus* H. C. Lea, 1843.

**chubutensis,** 1903. *Rostellaria* ?APORRHAIDAE

1903. AMNBA, 9:220, pl. 2, fig. 17.
1907*a*. AMNBA, 14:29. *Aporrhais* (Rocanéen).
1914. NPRMP, 1(3):94 (Salamanquéen).

*Type Locality.*—Río Chico, Chubut.
*Syntypes.*—#756, two specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Salamanca Formation (Paleocene).
*Remarks.*—Ihering transferred this species to the *Aporrhais* but it is more likely a species of *Struthiolaria.*

**chubutensis,** 1904. *Strophocheilus* STROPHOCHEILIDAE

1904. RMLP, 2:241, pl. 2, fig. 13–14 ("Notostylops" beds).
1907*a*. AMNBA, 14:463.
1914. NPRMP, 1(3):70 (Cretáceo Superior, "Notostylopeano").
1969. Parodiz, ACM, 40:170.

*Type Locality.*—Cañadón Blanco, south side of Lake Colhue Huapi, Chubut.
*Lectotype.*—#560, cast, coll. Ameghino (reported in error as Hauthal by Ihering (1914).
*Stratigraphy.*—Casamayor Formation (Lower Eocene).
*Remarks.*—The lectotype was designated by Parodiz (1949*b*:181, fig. 1a) as the specimen figured in Ihering (1904, pl. 2, fig. 13). Parodiz (1949*b*) also clarified the status of 15 paralectotypes. As for *S. hauthali,* the collector of the type lot was C. Ameghino, not Hauthal as reported by Ihering (1914). Three of the paralectotypes from Río Chico, Chubut (#560), became the holotype and paratypes for *Strophocheilus avus* Parodiz (1949*b*:181), a name later synonymized with *S.* (*Megalobulimus*) *hauthali* (Ihering) by Parodiz (1969).

**chubutiana,** 1907. *Scalaria* EPITONIIDAE

1907*a*. AMNBA, 14:364, pl. 14, fig. 99.

= *Epitonium chubutianum* (Ihering), **new combination.**
*Type Locality.*—Puerto Piramides, Chubut.
*Type.*—Not in the collection.
*Stratigraphy.*—Río Negro Formation (Upper Miocene).

*Remarks.*—Ihering (1907*a*:465) reported this species in a perforation from Puente Alsina at 73 m.

**clarae,** 1907. *Ostrea* OSTREIDAE

1907*a*. AMNBA, 14:10, pl. 1, fig. 6a, pl. 2, fig. 6a–c.
1914. NPRMP, 1(3):22 (Roca).

*Type Locality.*—Roca, Río Negro.
*Syntypes.*—#158, six valves, coll. Ameghino, 1904.
*Stratigraphy.*—Roca Formation (Paleocene).
*Remarks.*—Another lot is in the collection from Park-Aik (1907) or "Par-aiqu" (1914, one valve, "formação guaranitica, classificação incerta").

**clessini,** 1907. *Turbonilla* PYRAMIDELLIDAE: TURBONILLINAE

1907*a*. AMNBA, 14:145. New name for *Turbonilla iheringi* Clessin (1900:174, pl. 36, fig. 7), not *T. iheringi* Cossmann (1899*a*:235, pl. 10, fig. 12), and not *T. iheringi* Clessin (1900:168–169, pl. 35, fig. 5).

*Type Locality.*—"Südbrasilien, lgt. v. Ihering, Mus. Berol.," as given in Clessin (1900:174).
*Stratigraphy.*—Patagonia Formation (Lower Miocene).
*Remarks.*—Clessin (1900) separately described two specimens under the name *Turbonilla iheringi* without mention of their primary junior homonymy with each other and with the senior valid name *T. iheringi* Cossmann, 1899. Ihering (1907*a*) observed that Clessin's material consisted of two species, the first of which he let stand as *T. iheringi* Clessin (1900:168) despite its junior status to *T. iheringi* Cossmann. The other species (*T. iheringi* Clessin, 1900:174) was named *Turbonilla clessini* by Ihering. He noted that Cossmann had already used *T. iheringi,* and without regard for priority of the available names he offered *Turbonilla eopatagonica* as an unnecessary replacement name for the valid senior name, *T. iheringi* Cossmann. *Turbonilla iheringi* Clessin (1900:168) remains a junior homonym of Cossmann's name, and requires a replacement name.

**colhuapensis,** 1903. *Diplodon* HYRIIDAE

1903. AMNBA, 9:217, fig. 2.
1907*a*. AMNBA, 14:466 (". . . depots qui sont probablement tertiares.")
1914. NPRMP, 1(3):36 (Cretáceo).
1969. Parodiz, ACM, 40:53–54.

*Type Locality.*—Colhue Huapi, Chubut.
*Lectotype.*—#295, coll. Ameghino; in CMNH.
*Stratigraphy.*—Sehuen Formation (Paleocene).
*Remarks.*—The lectotype was designated by Parodiz, 1969:54, pl. 1, fig. 1, 3–4 (fig. 2 is a paratype) based on material received in exchange from Dr. Max Birabén, at that time Director of the Museo Argentino de Ciencias Naturales. This species will be included in a new genus (Parodiz, in preparation).

**Cominella** sp. BUCCINIDAE: PHOTINAE

1914. NPRMP, 1(3):105 (Patagonico).

*Locality.*—Punta Atlas, Chubut.
*Specimens.*—#859, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**concors,** 1902. *Gryphaea* GRYPHAEIDAE

1902*a*. AMNBA, 4:11, 114, fig. 1–3 (Formation Guaranitique).
1903. AMNBA, 9:210.
1904. RMLP, 11:210.
1907*a*. AMNBA, 14:8, 43 (Salamanquéen).
1914. NPRMP, 1(3):21 ("étage guaraniéen").

*Type Locality.*—Valle Alsina, Chubut.
*Syntypes.*—#144, five valves, coll. G. Burmeister, 1887.
*Other Lot.*—#145, Pico Salamanca, two valves.
*Stratigraphy.*—Salamanca Formation (Paleocene).

**confinis,** 1897. *Marginella* MARGINELLIDAE

1897*b*. RMP, 2:307, pl. 3, fig. 8 (Formação Santacruzense).
1907*a*. AMNBA, 14:200. *Neoimbricaria* (Superpatagonico).

= *Neoimbricaria quemadensis* (Ihering).
*Type Locality.*—La Cueva, Santa Cruz.
*Holotype.*—#866, coll. Ameghino (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—*Marginella gracilior* Ihering is another synonym of *N. quemadensis* (Ihering).

**consimilis,** 1897. *Natica* NATICIDAE

1897*b*. RMP, 2:283, text fig. 12 (Formação Santacruzense).
1899*a*. NJMGP, 2:28. *Natica famula* Philippi.
1907*a*. AMNBA, 14:156. *Polynices magellanica* "var."
1914. NPRMP, 1(3):85. *Polynices magellanica* (*consimilis*) (Superpatagonico).

= *Lunatia magellanica* Hombron and Jacquinot, 1834.
*Type Locality.*—La Cueva, Santa Cruz.
*Syntypes.*—#672, two specimens, coll. Ameghino; #673, San Jorge, ten specimens, coll. J. Bicego; #674, Golfo San Jorge, two specimens, coll. Ameghino; #675, Deseado (Formación Araucana), one specimen, coll. Ameghino, 1900.
*Stratigraphy,*—Patagonian Formation (Lower Miocene) and also Araucanean Formation (Pliocene).
*Remarks.*—*Natica famula* Philippi referred to by Ihering (1899*a*) is a species from Chile, different from *consimilis,* although it is also found in Santa Cruz (#668–#670 in the Ihering Collection). It is related to a longer species, *Lunatia pyrotheriorum* Ihering from the Patagonian.

***Conus*** sp. CONIDAE

1907*a*. AMNBA, 14:448.

= *Conus clenchi* Martins, 1943. Recent.
*Locality.*—Reported from "Pampien de Puerto Militar aff. *C. portoricanus* Hwass." The type locality of *Conus clenchi* Martins is Puerto Deseado, Santa Cruz.
*Stratigraphy.*—Belgrano Formation (Lower Pleistocene).
*Remarks.*—*Conus carcellesi* Martins, 1945, is a synonym of *C. clenchi* according to Rios (1975:124).

**Corbiculella,** 1907. CORBICULIDAE

1907*a*. AMNBA, 14:462, 469. New subgenus of *Corbicula* Megerle.
1969. Parodiz, ACM, 40:98. Subgenus of *Neocorbicula* Fischer.

*Type Species.*—*Corbicula tenuis* Ihering.
*Stratigraphy.*—Paraná Formation (Upper Miocene).

**cossmanni,** 1907. *Amussium* [sic] PROPEAMUSSIIDAE

1907*a*. AMNBA, 14:260, pl. 9, fig. 59a–b.
1914. NPRMP, 1(3):35 (Patagonico).

= *Amusium cossmanni* Ihering.
*Type Locality.*—Punta Atlas, Chubut.
*Holotype.*—#288, one valve, coll. R. Valentin, 1897 (by monotypy).
*Stratigraphy.*—Paraná Formation (Entre Rios) and Río Negro Formation (Rionegrense) in Chubut (Upper Miocene).
*Remarks.*—Ihering (1907*a*) remarked that this species was found together with *Ostrea hatcheri* Ortmann. *Amusium cossmanni* resembles *Amusium darwinianum* (d'Orbigny), which is also from the Paraná Formation.

**cossmanni,** 1907. *Chione* VENERIDAE

1907*a*. AMNBA, 14:350. New name for *Venus chiloensis* in Ortmann (1900:378) and Ortmann (1902: 137, pl. 27, fig. 10), not *Venus chiloensis* Philippi, 1887.

= ?*Protothaca cossmanni* (Ihering).
*Type Locality.*—Punta Arenas, Chile (Ortmann).
*Stratigraphy.*—?Lower Miocene.
*Remarks.*—Ihering (1907*a*:350) remarked that *chiloensis* belongs to *Protothaca* while *cossmanni* has the sculpture of *Chione,* but that is not a generic definition.

**cossmanni,** 1907. *Cominella* BUCCINIDAE: PHOTINAE

1902. Ortmann, p. 209, pl. 39, fig. 18. *Buccinum obesum* var. *minor* (Philippi).
1907*a*. AMNBA, 14:191 (Santacruzense).
1914. NPRMP, 1(3):105.

= *Cominella minor* (Philippi, 1887).
*Type Locality.*—Santa Cruz.
*Holotype.*—#857, received from Ortmann (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Feruglio (1949–1950) reported the species for Río Turbio.

**cossmanni,** 1907. *Lima* LIMIDAE

1907*a*. AMNBA, 14:264, pl. 9, fig. 62.
1914. NPRMP, 1(3):29. *Lima* (*Limatula*) (Patagonico Inferior).

*Type Locality.*—Punta Nova (Nueva), Golfo San Jorge.
*Syntypes.*—#225, three valves, coll. Ameghino; #226, Casamayor, one valve, coll. Ameghino, 1900.
*Other Lot.*—#227, ". . . valva isolada que foi examinada pelo snr. Cossmann." (Ihering, 1914).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—The three species of *Lima* described by Ihering are all from the

same type locality and same stratigraphic position, but they are easily distinguished.

**cossmanni,** 1907. *Proscaphella* VOLUTIDAE

1907*a*. AMNBA, 14:206, pl. 6, fig. 41a–b.
1914. NPRMP, 1(3):110. *Cymbiola* (*Miomelon*) (Patagonico).

= *Adelomelon* (*Pachycymbiola*) *cossmanni* (Ihering).

*Type Locality.*—Santa Cruz.

*Syntypes.*—#888, two specimens, coll. J. Bicego.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Ihering (1907*a*): "... intermediaire entre *P. gracilis* et *quemadensis.*"

**cossmanni,** 1903. *Rostellaria* APORRHAIDAE

1903. AMNBA, 9:219, pl. 2, fig. 15.
1907*a*. AMNBA, 14:49. *Aporrhais* (Salamanquéen).
1914. NPRMP, 1(3):94 (Salamanqueano).

= *Aporrhais cossmanni* (Ihering).

*Type Locality.*—Río Chico, Chubut.

*Syntypes.*—#757, two specimens (Ihering [1907*a*]: "L'unique exemplaire"), coll. Ameghino, 1900.

*Stratigraphy.*—Salamanca Formation (Paleocene).

*Remarks.*—The syntypes have the siphonal canal and peristoma missing but the body whorl is of *Aporrhais.*

**cossmanni,** 1907. *Scalaria* EPITONIIDAE

1907*a*. AMNBA, 14:141, pl. 4, fig. 12. Primary junior homonym of *Scalaria* (*Nodiscala*) *cossmanni* de Boury, 1889.
1914. NPRMP, 1(3):80. *Cirsotrema quemadense* [sic] Cossmann (Superpatagonico).

= *Opalia* (*Nodiscala*) *quemadensis* (Cossmann), **new combination.**

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Holotype.*—#616, coll. Ameghino, 1900 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Opalia* (*Nodiscala*) *eolis* Clench and Turner, 1950, is a closely related species.

**cossmanni,** 1907. *Tenagodus* SILIQUARIIDAE

1907*a*. AMNBA, 14:166, pl. 5, fig. 25.
1914. NPRMP, 1(3):91 (Superpatagonico).

= *Siliquaria cossmanni* (Ihering).

*Type Locality.*—Cañada de los Artilleros, Santa Cruz.

*Holotype.*—#743, a small fragment of tube, coll. Ameghino, 1900 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**crucis,** 1907. *Solen* SOLENIDAE

1897*b*. RMP, 2:263. *Solen elytron* Philippi.
1907*a*. AMNBA, 14:318, pl. 12, fig. 83.

1914. NPRMP, 1(3):59 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.
*Holotype.*—#491, coll. Ameghino (by monotypy).
*Other Lot.*—#492, Rada Tilly, Golfo San Jorge, one specimen, coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This species resembles *Solen scalprum* Broderip.

***cruzensis,*** 1907. *Genotia* TURRIDAE

1907*a*. AMNBA, 14:222. New name for *Genotia cuevensis* in Ortmann (1902:240, pl. 37, fig. 2), not *Genota cuevensis* Ihering, 1897 (Superpatagonico).

= *Genota cuevensis* (Ihering).
*Type Locality.*—Mouth of the Santa Cruz River (Ortmann).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This name was unnecessarily proposed for large forms correctly identified by Ortmann (1902) as *Genota cuevensis* Ihering. *Genotia* Fischer, 1883 (= *Genota* H. and A. Adams, 1853).

***cruzialis,*** 1907. *Phacoides promaucana* "var." LUCINIDAE

1907*a*. AMNBA, 14:288, pl. 13, fig. 90a–b.
1914. NPRMP, 1(3):45 (Superpatagonico).

= *Lucina cruzialis* (Ihering).
*Type Locality.* Yegua Quemada, Santa Cruz.
*Syntypes.*—#374, coll. Ameghino.
*Other Lots.*—#375, Santa Cruz, three specimens, coll. J. Bicego, 1897; #376, Jack Harvey, one specimen; #377, Pan de Azucar, two specimens, coll. Ameghino, 1900; #378, Casamayor, 11 specimens, coll. Ameghino, 1900; #379, Cabo Tres Puntas, one valve, coll. Ameghino, 1900; #380, Punta Nodales, three specimens, coll. Ameghino, 1900; "Region de Sur," Golfo San Jorge, two casts, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***cuevensis,*** 1897. *Genota* TURRIDAE

1897*b*. RMP, 2:313, pl. 3, fig. 10.
1902. Ortmann, p. 240, pl. 37, fig. 2. *Genota cuevensis.*
1907*a*. AMNBA, 14:222. *Genotia.*
1914. NPRMP, 1(3):113 (Superpatagonico).

*Type Locality.*—La Cueva, Santa Cruz.
*Holotype.*—#911, coll. Ameghino (by monotypy).
*Other Lots.*—#912, Cabo Tres Puntas, one specimen, coll. Ameghino; #913, Golfo San Jorge, coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—See note on *G. cruzensis* for *Genota* vs. *Genotia.*

***cuevensis,*** 1897. *Gibbula fracta* "var." ARCHITECTONICIDAE

1897*b*. RMP, 2:274, pl. 3, fig. 2.
1907*a*. AMNBA, 14:131. *Gibbula cuevensis* (Patagonico Superior).
1914. NPRMP, 1(3):72 (Superpatagonico).

= *Valdesia dalli* (Ihering).

*Type Locality.*—La Cueva, Santa Cruz.
*Holotype.*—#571, coll. Ameghino (by monotypy).
*Other Lot.*—#572, Cañada de los Artilleros, six specimens, coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***cuevensis,*** 1897. *Pectunculus pulvinatus* "var." GLYCYMERIDIDAE

1897*b*. RMP, 2:238, pl. 7, fig. 46 and pl. 8, fig. 50 (Form. santacruzensis).
1907*a*. AMNBA, 14:240, 345, 373. *Glycimeris cuevensis* [sic].
1914. NPRMP, 1(3):19 (Superpatagonico and Magellanico).

= *Glycymeris cuevensis* (Ihering).
*Type Locality.*—La Cueva, Santa Cruz.
*Syntypes.*—#122, two valves, coll. Ameghino.

*Other Lots.*—#123, Yegua Quemada, six valves; #124, Santa Cruz, one valve, coll. J. Bicego; #125, Manantial Salado, one valve, coll. Ameghino, 1900; #126, Cañada de los Artilleros, two large valves and 30 smaller valves, coll. Ameghino, 1900; #127, Puerto Piramides, Chubut, one valve, coll. Ameghino, 1903 (label says "from Dr. F. Lahille"); #128, "Fin de Barrancas"[?], three valves from Dr. Lahille; #129, Punta Arenas (Magellanico), one specimen received from Ortmann under the name *Pectunculus ibari* Philippi.

*Stratigraphy.*—Magellanian (Lower Oligocene) and Patagonian Formation (Lower Miocene).

*Remarks.*—E. Feruglio (1949–1950) found the species at Río Turbio. *Glycymeris pulvinatus* Lamarck from the Tertiary of Europe has no connection with *G. cuevensis.*

***cuevensis,*** 1897. *Turbonilla* PYRAMIDELLIDAE

1897*b*. RMP, 2:276, text fig. 11 (Formação Santacruzense).
1907*a*. AMNBA, 14:144.
1914. NPRMP, 1(3):81 (Superpatagonico).

*Type Locality.*—La Cueva, Santa Cruz.
*Holotype.*—#635, coll. Ameghino (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—See note under *Turbonilla observationis* (Ihering).

***Cymbiola*** (*Pachycymbiola*) sp. VOLUTIDAE

1914. NPRMP, 1(3):110 (Formação Entreriana ou Araucana).

= *Adelomelon* (*Pachycymbiola*) *feruglioi* (Doello-Jurado, 1931).

*Locality.*—The undetermined species of Ihering is from Puerto Piramides, Chubut; the type of *C. feruglioi* Doello-Jurado is from Sierra Laziar, Santa Cruz.

*Specimens.*—#887, one incomplete specimen, coll. Hauthal.

*Stratigraphy.*—Sierra Laziar (Laziarense), Araucanean Formation (Pliocene).

*Remarks.*—This species is intermediate between *Adelomelon* (*Pachycymbiola*) *ameghinoi* (Ihering) and *A.* (*P.*) *brasiliana* (Solander).

***dalli,*** 1907. *Calliostoma* TROCHIDAE

1907*a*. AMNBA, 14:437, pl. 17, fig. 114a–c. (Deseado Formation).
1914. NPRMP, 1(3):77 (Pampeano).

= *Calliostoma militaris* Ihering.

*Type Locality.*—Puerto Militar, Prov. Buenos Aires.

*Syntypes.*—#602, three specimens, coll. Ameghino, 1905.

*Stratigraphy.*—Belgrano Formation (Lower Pleistocene).

*Remarks.*—*Calliostoma dalli* Ihering (1907*a*), *C. amazonicum* Finlay (1930), and *C. quequensis* Carcelles (1944) are all synonyms of *C. militaris.* See *C. bellicosum* Ihering.

***dalli,*** 1907. *Crassinella* CRASSATELLIDAE

1907*a*. AMNBA, 14:280, text fig. 12a–b.
1914. NPRMP, 1(3):41 (Patagonico Inferior).

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#334, 100 valves (the one figured is a right valve, 4.5 × 4 mm), coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—See *C. acutus* Dall from the Pliocene of Florida.

***dalli,*** 1897. *Cucullaea* CUCULLAEIDAE

1897*b*. RMP, 2:241, pl. 7, fig. 47, and pl. 8, fig. 54 (Formação Santacruzense).
1907*a*. AMNBA, 14:232. *Cucullaea alta* Sowerby.
1914. NPRMP, 1(3):14. *Cucullaea alta* Sowerby (Patagonico).

= *Cucullaea alta* Sowerby, 1846.

*Type Locality.*—Jack Harvey, Santa Cruz.

*Type.*—Not in the collection.

*Other Lots.*—#84, one complete specimen, coll. Ameghino, 1900; #85, two valves; #86, Santa Cruz, two casts, coll. J. Bicego; #87, Camarones, two fragments attached to *Ostrea,* coll. Ameghino, 1900; #88, Cañada de los Artilleros, one valve, coll. Ameghino, 1900; #89, Punta Casamayor, one valve, coll. Ameghino, 1900; #90, Cabo Tres Puntas, coll. Ameghino, 1905; #91, Cabo Tres Puntas, coll. Ameghino, 1900; #92, Punta Nueva, one complete specimen, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***dalli,*** 1897. *Gibbula* ARCHITECTONICIDAE

1897*b*. RMP, 2:273, pl. 3, fig. 1, and pl. 4, fig. 13 (Formação Santacruzense).
1902. Ortmann, p. 171, pl. 31, fig. 9a–b.
1907*a*. AMNBA, 14:131.
1914. NPRMP, 1(3):73 (Superpatagonico).

= *Valdesia dalli* (Ihering).

*Type Locality.*—Jack Harvey, Santa Cruz.

*Syntypes.*—#576, four specimens, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This is the large form of *G. cuevensis* (= *dalli*); see also *Gibbula cuevensis* and *Gibbula cuevensis fracta* Ihering. See Del Río (1985) for the description of the genus *Valdesia.*

***dalli,*** 1907. *Lithodomus patagonica* [sic] MYTILIDAE: LITHOPHAGINAE

1907*a*. AMNBA, 14:275.
1914. NPRMP, 1(3):39 (Patagonico Medio).

= *Lithophaga patagonica* (d'Orbigny, 1846).

*Type Locality.*—Rada Tilly, Golfo San Jorge.

*Holotype.*—#320, by original designation, "exemplaire typique 32 mm," two paratypes, coll. Ameghino, 1901, found perforating *Ostrea hatcheri.*

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species resembles *Lithodomus platensis* Philippi (1893) from the Paraná Formation.

***dalli,*** 1907. *Lyria* VOLUTIDAE

1907*a*. AMNBA, 14:204, pl. 14, fig. 9.
1914. NPRMP, 1(3):108 (Patagonico Medio).

= *Enaeta dalli* (Ihering), **new combination.**

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.

*Holotype.*—#874 (a very small specimen), coll. Ameghino, 1905 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—On consultation with H. W. Dall, Ihering placed this species in *Lyria.* There is another lot, #875, assumed to be a different species by Ihering, but too incomplete for description.

***dalli,*** 1907. *Phacoides* LUCINIDAE

1907*a*. AMNBA, 14:284. Not figured.
1914. NPRMP, 1(3):46 (Superpatagonico).

= *Lucina dalli* (Ihering).

*Type Locality.*—Cañada de los Artilleros, Santa Cruz.

*Syntypes.*—#386, six valves, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Phacoides* Blainville, 1825 (= *Lucina* Bruguière, 1797).

***dalli,*** 1907. *Venericardia* CARDITIDAE

1907*a*. AMNBA, 14:413, pl. 16, fig. 108a–b.
1914. NPRMP, 1(3):43 (Formação Araucana).

*Type Locality.*—Sierra Laziar, Santa Cruz.

*Syntypes.*—#353, three valves, coll. Ameghino, 1900.

*Stratigraphy.*—Araucanean Formation (Lower Pliocene).

***dautzembergi,*** 1897. *Triton* (*Argobuccinum*) RANELLIDAE: RANELLINAE

1897*b*. RMP, 2:293, text fig. 16 (Formação Santacruzense).
1907*a*. AMNBA, 14:176. *Lotorium.*
1914. NPRMP, 1(3):97. *Lotorium* (*Lampusia*) (Superpatagonico).

= *Fusitriton dautzembergi* (Ihering), **new combination.**

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Holotype.*—#791, the specimen is small, juvenile (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***densestriata,*** 1897. *Struthiolaria ornata* "var." STRUTHIOLARIIDAE

1897*b*. RMP, 2:292, text fig. 15.
1907*a*. AMNBA, 14:171.
1914. NPRMP, 1(3):95 (Patagonico Medio–Inferior).

= *Struthiolaria ornata* Sowerby (1846).

*Type Locality.*—Not reported in the original description, but the specimens of the "var." in the "type lot" were labelled as being from Santa Cruz.

*Syntypes.*—#769, seven specimens, coll. Ameghino.

*Other Lots.*—#770, Pan de Azucar, coll. Ameghino; #771, Manantial Salado, three specimens, coll. Ameghino; #772, Cabo Tres Puntas, six specimens, coll. Ameghino; #773, Sierra de los Baguales, eight specimens, coll. Ameghino; #774, Corral Foyel, three specimens, coll. Hauthal; #775, Golfo San Jorge, five specimens, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Of *Struthiolaria ornata* Sowerby (1846:260, pl. 4, fig. 62) there are also five lots in the Ihering Collection: #777, Santa Cruz, 11 specimens, coll. J. Bicego; #778, ten specimens, coll. Hatcher, received from Ortmann; #779, "Foz do Río Santa Cruz," one specimen received from Ortmann; #780, La Cueva in conglomerate; #781, Cañada de los Artilleros, one specimen, coll. Ameghino. From Park-Aik, Río Sehuen there is one cast, #782, collected by C. Ameghino, and labelled as "*Struthiolaria* sp." which is probably *S. ornata* (see *Struthiolaria prisca*).

**derbyi,** 1907. *Diplodon* HYRIIDAE

1907*a*. AMNBA, 14:466, pl. 18, fig. 128 (Cretaceous).
1914. NPRMP, 1(3):36 (Terciario).
1969. Parodiz, ACM, 40:82, pl. 8, fig. 3, *Fossula derbyi* (Ihering).

= *Fossula derbyi* (Ihering).

*Type Locality.*—Santa María da Bocca do Monte, Rio Grande do Sul, Brasil.

*Holotype.*—#297, upper portion of a valve, coll. Orville A. Derby (by monotypy).

**deseadense,** 1914. *Calliostoma* ?TURBINIDAE

1914. NPRMP, 1(3):77, pl. 3, fig. 12 (Formação Araucana).

*Type Locality.*—Deseado, Santa Cruz.

*Holotype.*—#603, coll. Ameghino, 1900 (by monotypy).

*Stratigraphy.*—Araucanean Formation (Pliocene)

*Remarks.*—This species is not a *Calliostoma,* but rather more like *Turbo.* The holotype is a broken specimen but in the figure it shows complete ornamentation.

**deseadensis,** 1907. *Myochlamys* PECTINIDAE

1907*a*. AMNBA, 14:410, pl. 15, fig. 102a–b.
1914. NPRMP, 1(3):30 (Formação Araucana).

= *Chlamys deseadensis* (Ihering).

*Type Locality.*—Sierra Laziar.

*Syntypes.*—#242, 12 valves.

*Stratigraphy.*—(Laziarense) Araucanean Formation (Lower Pliocene).

**deuterolivella,** 1907. *Volvaria* MARGINELLIDAE

1907*a*. AMNBA, 14:197. New name for *Marginella oliviformis* in Ortmann (1900:376), not *Marginella oliviformis* Tuomey and Holmes, 1857.
1914. NPRMP, 1(3):106. *Marginella* (*Volvaria*) *deuterolivella* (Patagonico).

= ?*Marginella* (*sensu lato*) *deuterolivella* (Ihering).
*Type Locality.*—Mouth of Santa Cruz River (Ortmann).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Specimens of this species were misidentified as *Marginella olivella* Reeve, 1865, by Ortmann (1902:225, pl. 35, fig. 3a, b). This species is more elongated than any living species of *Marginella* from the southwestern Atlantic, and is *Columbella*-like in shape. There is one specimen (#863, Golfo San Jorge, coll. Ameghino) in the Ihering Collection.

***dubiosa,*** 1907. *Gibbula* ARCHITECTONICIDAE

1907*a*. AMNBA, 14:130, pl. 4, fig. 91a–b.
1914. NPRMP, 1(3):73 (Patagonico Medio).

= *Valdesia dalli* (Ihering).
*Type Locality.*—Golfo San Jorge.
*Holotype.*—#577, (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This species was based on a distorted specimen of "*Gibbula*" *dalli.*

***dynastes,*** 1907. *Nucula* NUCULIDAE

1907*a*. AMNBA, 14:3, pl. 1, fig. 2a–b (Rocanéen).
1914. NPRMP, 1(3):12 (Roca, Cretáceo Superior, Roca).

*Type Locality.*—General Roca, Río Negro.
*Syntypes.*—#64, two casts, received from Ameghino in 1905.
*Stratigraphy.*—Roca Formation (Paleocene).

***elongata,*** 1914. *Panopaea* [sic] *nucleus* HIATELLIDAE

1914. NPRMP, 1(3):64. Not figured (Cretáceo Superior, Roca).

= *Panopea nucleus* (Ihering).
*Type Locality.*—Corral Foyel.
*Holotype.*—#517, one cast, coll. Hauthal (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—There is another specimen in the collection (MACN #2480), Foyel River. Ihering's brief diagnosis indicates a form higher than *nucleus* with the margin slightly convex (Ihering: ". . . me parece uma variedade").

***Entacanthus,*** 1907. MURICIDAE

1907*a*. AMNBA, 14:14:183. New subgenus of *Trophon* Montfort.

= *Thais* (*Stramonita*) Schumacher, 1817.
*Type Species.*—*Trophon monoceros* Ihering.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***entreriana,*** 1907. *Anomalocardia* VENERIDAE

1907*a*. AMNBA, 14:386.
1914. NPRMP, 1(3):57 (Formação Entreriana).

*Type Locality.*—Paraná, Entre Rios.
*Syntypes.*—#476, five valves, Bravard coll.
*Remarks.*—The syntypes were identified by Borchert (1901:39, pl. 3, fig. 12–

21) as *Venus brasiliana* (Gmelin). The specimens were sent to W. H. Dall who confirmed it to be a different species but still very similar to *Anomalocardia brasiliana* (Gmelin).

**entreriana,** 1907. *Dosinia* VENERIDAE

1901. Borchert, p. 36. *Dosinia patagonica,* not *Dosinia patagonica* Philippi, 1893.
1907*a*. AMNBA, 14:383. Not figured.

= *Dosinia meridionalis* Ihering.
*Type Locality.*—Paraná, Entre Rios (Borchert).
*Type.*—Not in the collection.
*Stratigraphy.*—Paraná Formation (Upper Miocene); also in the Patagonian Formation.
*Remarks.*—Ihering (1907*a*): "J'ai examiné la coquille décrite par Borchert et vérifie quelle n'est pas identique avec *Dosinia patagonica.*"

**entreriana,** 1907. *Leda* NUCULANIDAE

1901. Borchert, p. 32, *Leda patagonica,* not *Leda patagonica* d'Orbigny, 1846.
1907*a*. AMNBA, 14:371. Not figured.

= *Nuculana entreriana* (Ihering).
*Type Locality.*—Paraná, Entre Rios (Borchert).
*Type.*—Not in the collection.
*Stratigraphy.*—Paraná Formation (Upper Miocene).
*Remarks.*—Other "*Leda*" in the collection are only from Patagonia, not from Paraná.

**entrerianus,** 1907. *Tagelus gibbus* PSAMMOBIIDAE: SOLECURTINAE

1901. Borchert, p. 21, pl. 3, fig. 26. *Solecurtus platensis* d'Orbigny.
1907*a*.—AMNBA, 14:387. Not figured.

= *Tagelus plebeius* (Solander, 1823). Recent.
*Type Locality.*—Paraná, Entre Rios (Borchert).
*Stratigraphy.*—Paraná Formation (Upper Miocene).
*Remarks.*—*Solecurtus platensis* d'Orbigny, *Tagelus gibbus* of authors, and *T. plebeius* (Solander) are all synonyms for the same species which is widely distributed in the western Atlantic.

**eopatagonica,** 1907. *Turbonilla* PYRAMIDELLIDAE: TURBONILLINAE

1907*a*. AMNBA, 14:144. New name for *Turbonilla iheringi* in Cossmann (1899*a*:235, pl. 10, fig. 12), not *T. iheringi* (Clessin, 1902).
1914. NPRMP, 1(3):82 (Superpatagonico).

= *Turbonilla iheringi* Cossmann, 1899.
*Type Locality.*—Yegua Quemada, Santa Cruz.
*Stratigraphy.*—Patagonia Formation (Lower Miocene).
*Remarks.*—This name is an unnecessary replacement name for *T. iheringi* Cossmann. The only specimen in the collection is #636, collected by Ameghino in 1900, and therefore not the type of Cossmann's "*T. iheringi*" described in 1899. The four species of *Turbonilla* named by Ihering, *T. clessini, T. cuevensis, T. observationis,* and *T. eopatagonica* (= *T. iheringi* Cossmann) are all similar

to the Recent *Turbonilla* (*Pyrgiscus*) *uruguayensis* Pilsbry. See Remarks section under *T. clessini.*

***espejoana*** "Ihering," 1902. *Chlamys* PECTINIDAE

1902. Ameghino, ASCA, 54:224. *Nomen nudum.*

= *Pecten praenuncius* Ihering, 1897*b*.

***eupatagonica,*** 1907. *Myochlamys* PECTINIDAE

1907*a*. AMNBA, 14:259, pl. 9, fig. 58.
1914. NPRMP, 1(3):30 (Superpatagonico).

= *Chlamys eupatagonicus* (Ihering).
*Type Locality.*—Cañada de los Artilleros, Santa Cruz.
*Holotype.*—#243, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***eupyga,*** 1907. *Chione* VENERIDAE

1907*a*. AMNBA, 14:310, pl. 12, fig. 80.
1914. NPRMP, 1(3):55 (Patagonico Superior).

*Type Locality.*—San Julian, Santa Cruz.
*Holotype.*—#452, coll. Ameghino, 1900 (by monotypy).
*Other Lot.*—#453, Rada Tilly, Santa Cruz, coll. S. Roth, reported from "Roca."
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The specimen described and figured by Ihering is a fragment of a valve in poor condition for correct identification; it may belong in *Chione meridionalis* Sowerby.

***faira,*** 1907. *Ostrea* OSTREIDAE

1907*a*. AMNBA, 14:406.
1914. NPRMP, 1(3):25 (Formação Araucana).

*Type Locality.*—Cabo Fairweather (Buentiempo) Santa Cruz.
*Syntypes.*—#196, two large specimens received from Ortmann.
*Stratigraphy.*—Araucanean Formation (Pliocene).

*Remarks.*—*Ostrea ingens* in Ortmann (1902:99, pl. 18, fig. 1a–b) is in part this species.

***fairus,*** 1907. *Trophon inornatus* MURICIDAE

1907*a*. AMNBA, 14:402.
1914. NPRMP, 1(3):100 (Formação Araucana).

= *Trophon* (*Austrotrophon*) *lamellosus* (Gmelin, 1791).
*Type Locality.*—Cabo Fairweather (Buentiempo), Santa Cruz.
*Syntypes.*—#810, two specimens, coll. Hatcher, received from Ortmann.
*Stratigraphy.*—Araucanean Formation (Pliocene).

***felschi,*** 1921. *Aturia* (*Sphenaturia*) NAUTILIDAE

1921. Physis, Buenos Aires, 5:76.

*Type Locality.*—Punta Chocoi, Carelmapu, Chile.

*Holotype.*—Collected by J. Flesch; status unknown.

*Stratigraphy.*—"Estratos de Boquerón" (below Patagonian Formation).

*Remarks.*—Referring to the holotypes of this species and *A.* (*S.*) *brueggeni,* Ihering (1921) stated, "Los ejemplares tipicos quedan depositados en este Museo [Museo Argentino de Ciencias Naturales, Buenos Aires]."

***filipponei*** [sic], 1907. *Lotorium* RANELLIDAE: CYMATIINAE

1907*a*. AMNBA, 14:443, pl. 17 (text states in error "XVIII") fig. 22a–b.

= *Cymatium* (*Cabestana*) *felipponei* (Ihering), emendation.

*Type Locality.*—Maldonado, Uruguay.

*Type.*—Not in the collection.

*Stratigraphy.*—Querandí Formation (Pleistocene).

*Remarks.*—Ihering mentioned another specimen (1907*a*) from Punta Carretas, Montevideo, also received from F. Felippone of Uruguay.

***Fimbria*** sp. LUCINIDAE

1897*b*. RMP, 2:219.

*Specimens.*—Not in the collection.

*Remarks.*—A single valve from Yegua Quemada, Santa Cruz, which Ihering said was *Corbis*-like, but different from "*Fimbria*" *patagonica* (Philippi). *Corbis patagonica* Philippi is of questionable taxonomic position. *Fimbria* M. von Muhlfeld, 1811; not Bohadsch, 1761 (= *Corbis* Cuvier, 1817).

***fissocostalis,*** 1899. *Pecten* PECTINIDAE

1899*a*. NJMGP, 2:11, pl. 1, fig. 1.
1907*a*. AMNBA, 14:255. *Myochlamys.*
1914. NPRMP, 1(3):31 (Patagonico).

= *Chlamys* (*Zygochlamys*) *fissocostalis* (Ihering); see Morra (1985).

*Type Locality.*—Santa Cruz.

*Syntypes.*—#244, two complete specimens and four valves, coll. J. Bicego, 1897.

*Other Lot.*—#245, fragment of a large valve, coll. Bicego; probably same locality.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***foyela,*** 1914. *Myochlamys* PECTINIDAE

1914. NPRMP, 1(3):33, pl. 1, fig. 3 (Patagonico).

= *Chlamys foyela* (Ihering).

*Type Locality.*—Corral Foyel, Neuquen.

*Syntypes.*—#273, three valves and pieces in conglomerate, coll. Hauthal.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***fracta,*** 1897. *Gibbula* ARCHITECTONICIDAE

1897*b*. RMP, 2:273, pl. 3, fig. 2 (Formação Santacruzense).
1907*a*. AMNBA, 14:131, "et Var. *cruzis*" not described.
1914. NPRMP, 1(3):73 (Superpatagonico); the specimen figured in 1897 is identified here as *cuevensis.*

= ?*Valdesia fracta* (Ihering).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Holotype.*—#578, one specimen in fragments (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Another specimen from the same locality is reported as *Gibbula diametralis* Cossmann. The differentiation of "*G.*" *fracta cuevensis* is very difficult; all specimens from the same area of Golfo San Jorge are probably individual variations.

***fraus,*** 1907. *Diplodon* HYRIIDAE

1907*a*. AMNBA, 14:467, pl. 18, fig. 129. Unnecessary replacement name for *Modiola contorta* Borchert, 1901:27, pl. 2, fig. 3–4, not *Unio contortus* Heude.
1969. Parodiz, ACM, 40:74, pl. 7, fig. 5.

= *Diplodon contortus* (Borchert, 1901), **new combination.**

*Type Locality.*—Paraná, Entre Rios (Borchert).

*Holotype.*—Examined by Parodiz in 1971 in the Senckenberg Museum, Frankfurt.

*Stratigraphy.*—Paraná Formation (Upper Miocene).

*Remarks.*—The name *contorta* is not preoccupied in *Diplodon*; therefore, *Diplodon fraus* Ihering, based on the type of *Modiola contorta* Borchert, is an unnecessary replacement name in that genus. This species belongs to the *Diplodon parallelipipedon* group.

***freti,*** 1907. *Venericardia sulcolunularis* CARDITIDAE

1907*a*. AMNBA, 14:347. Not figured.

*Type Locality.*—Carmen Sylva, Tierra del Fuego.

*Type.*—Not in the collection.

*Stratigraphy.*—Magellanian Formation (Lower Oligocene).

***fuegina,*** 1907. *Struthiolaria chilensis* STRUTHIOLARIIDAE

1907*a*. AMNBA, 14:343. Not figured.

= *Struthiolaria chilensis* Philippi, 1887.

*Type Locality.*—Carmen Sylva, Tierra del Fuego.

*Stratigraphy.*—Magellanian Formation (Lower Oligocene).

*Remarks.*—There are no specimens in the collection under the name *fuegina*, but there is one specimen of *S. chilensis*, labelled by Ihering as "cotypo," from Matanzas, Tertiary of Chile, received from R. A. Philippi. *Struthiolaria chilensis* is related to *S. nordenskjoldi* Wilckens, 1911, from the Tertiary of Seymour Island, Antarctica.

***fueguensis,*** 1907. *Cominella* BUCCINIDAE: PHOTINAE

1907*a*. AMNBA, 14:343, pl. 14, fig. 97a–b.
1908. Steinmann and Wilckens, 4(6):60, pl. 7, fig. 3–5. *Cominella obesa* "var." *fueguina*.
1914. NPRMP, 1(3):105 (Superpatagonico).

= *Cominella* (*Austrocominella*) *fueguensis* Ihering.

*Type Locality.*—Barrancas de Carmen Sylva, Tierra del Fuego.

*Syntypes.*—#858, two specimens, coll. Backhausen.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species is the type of the subgenus *Austrocominella* Ihering, 1907. It was also found by Feruglio at Río Turbio.

**gibber,** 1907. *Tellina* TELLINIDAE

1907*a*. AMNBA, 14:456, pl. 18, fig. 126a–b.
1914. NPRMP, 1(3):59 (Pampeano and post-Pampeano).

*Type Locality.*—Puerto Militar (Puerto Belgrano), Buenos Aires Province.

*Syntypes.*—#488, four valves from what Ihering indicates as Pampeano, and one valve post-Pampeano, coll. Ameghino.

*Stratigraphy.*—Belgrano Formation (Pleistocene) and Recent.

*Remarks.*—The Recent distribution of this species is from Rio de Janeiro to Chubut.

**golfina,** 1907. *Gibbula iheringi* "var." BUCCINIDAE: PHOTINAE

1907*a*. AMNBA, 14:133. Not figured.
1914. NPRMP, 1(3):74 (Patagonico).

= *Gibbula iheringi* Cossmann, 1899.

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.

*Holotype.*—#582, coll. Ameghino, 1900 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Ihering commented "Un des exemplaires que je possede" probably referring to *G. iheringi* Cossmann from Yegua Quemada, of which the "var." *golfina* is a synonym.

**golfonia,** 1914. *Cominella* BUCCINIDAE: PHOTINAE

1914. NPRMP, 1(3):105, pl. 3, fig. 5 (Patagonico Medio).

= *Cominella* (*Austrocominella*) *golfonia* Ihering.

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.

*Syntypes.*—#860, seven specimens, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Cominella iheringi* Feruglio, 1935, from the Salamanca Formation has affinities with this species.

**gracilior,** 1897. *Marginella* MARGINELLIDAE

1897*b*. RMP, 2:308, text fig. 18 (Formação Santacruzense).
1907*a*. AMNBA, 14:200. *Neoimbricaria*.
1914. NPRMP, 1(3):107 (Superpatagonico).

= *Neoimbricaria quemadensis* (Ihering).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Holotype.*—#867, coll. Ameghino, 1900 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—See *Marginella confinis* Ihering and *Marginella quemadensis* Ihering.

**gracilior,** 1896. *Voluta* VOLUTIDAE

1896. NDMG, 7:96. New name for *Voluta gracilis* in Philippi (1887), not *Voluta gracilis* Swainson, 1842.
1897*b*. RMP, 2:305. *Voluta philippianus* Dall.

1907*a*. AMNBA, 14:206. *Proscaphella gracilior* (Patagonico).
1914. NPRMP, 1(3):110. *Cymbiola* (*Miomelon*) *gracilior.*

= *Miomelon gracilior* (Ihering).
*Type Locality.*—Santa Cruz.
*Syntypes.*—#889, Santa Cruz, one specimen and one cast, coll. J. Bicego, 1897.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**gracilis,** 1897. *Cancellaria* CANCELLARIIDAE

1897*b*. RMP, 2:310, pl. 3, fig. 11 (Formação Santacruzense).
1907*a*. AMNBA, 14:213.
1914. NPRMP, 1(3):111 (Superpatagonico).

*Type Locality.*—La Cueva, Santa Cruz.
*Holotype.*—#896, coll. Bicego, 1897 (by monotypy).
*Other Lot.*—#897, Cañada de los Artilleros, two specimens, coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—*Cancellaria gracilis observatoria* Ihering is a synonym.

**gradata,** 1907. *Trophon inornatus* "var." MURICIDAE

1907*a*. AMNBA, 14:402. *Nomen nudum.*

*Remarks.*—The name *gradata* described on the same page was given to one of the two specimens of *T. inornatus fairus.* See also *Trophon varians gradata* Ihering, 1897.

**gradata,** 1897. *Trophon varians* "var." MURICIDAE

1897*b*. RMP, 2:297, 323 (Pan-Patagonico).
1907*a*. AMNBA, 14:403.
1914. NPRMP, 1(3):101. *T. varians "gradatus"* (Formação Araucana).

= *Trophon varians* (d'Orbigny, 1841).
*Type Locality.*—"Entre S. Jorge e Deseado," Santa Cruz.
*Holotype.*—#833, coll. Ameghino (by monotypy).
*Other Lots (as* Trophon varians*).*—#829, San Juan [sic] must be San Julian, four specimens, coll. Ameghino; #830, Sierra Laziar, ten specimens, coll. Ameghino; #831, Monte Espejo, five specimens, coll. Ameghino; #832, Golfo San Jorge, "Pampeano," five specimens, coll. Ameghino.
*Stratigraphy.*—Araucanean Formation (Pliocene) and Belgrano Formation (Pleistocene); Recent, common.

**guaranitica,** 1899. *Ostrea* OSTREIDAE

1899*b*. ASCA, 47:63–64 (Piso Sehuense, Formación Guaranitica).
1902*a*. AMNBA, 7:116.
1903. AMNBA, 9:213.
1907*a*. AMNBA, 14:50 (Sehuenéen).
1914. NPRMP, 1(3):2 (Guaranien).

= *Exogyra guaranitica* (Ihering).
*Type Locality.*—Park-Aik (Sehuen-Aik) Sehuen Valley, Santa Cruz.
*Syntypes.*—One lot of nine specimens is in the collection with one specimen, #149, marked as "type."
*Stratigraphy.*—Sehuenan Formation (Paleocene).

*Remarks.*—An incomplete specimen in the Ihering Collection, #150 from San Juan Creek, Santa Ana, Misiones, was identified as *guaranitica* but probably does not belong in the same Patagonian species. Ihering (1907*a*:52) stated that "Les huîtres de San Juan. . .ne peuvent non plus servir pour reconnaître l'âge géologique, de depôts respectifs [Upper Cretaceous or Tertiary]." The name "*guaranitica*" was taken from an ethnic root of the north, and is confusing for a Patagonian species. See Stratigraphic Units.

***guassus*** [sic], 1907. *Psammobia* PSAMMOBIIDAE

1907*a*. AMNBA, 14:312, pl. 14, fig. 95 (Patagonico).
1914. NPRMP, 1(3):57. *Psammobia guassu* (Patagonico Inferior).

= *Gari guassu* Ihering (*guassus* is a typographical error).

*Type Locality.*—Bajo de San Julian, Santa Cruz.

*Holotype.*—#478, one large cast, coll. Ameghino (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Ihering (1914) explained that the word "guassú" in Tupi language means large and can be used, Latinized, as an adjective; but Tupi are Indians of southern Brazil, and why the word was used for a Patagonian species is difficult to understand.

***hauthali,*** 1907. *Mytilus chorus* "var." MYTILIDAE

1897*b*. RMP, 2:232, pl. 9, fig. 55. *Mytilus* aff. *chorus*.
1902. Ortmann, p. 120, pl. 25, fig. 1a–b.
1907*a*. AMNBA, 14:273. *Mytilus chorus* "var." *hauthali*.

= *Chloromya hauthali* (Ihering).

*Type Locality.*—Mayten, Río Chubut.

*Syntypes.*—#304, three specimens in a conglomerate, coll. Hauthal.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species has affinities with *Mytilus pseudochorus* Doello-Jurado, 1922.

***hauthali,*** 1904. *Strophocheilus* MEGALOBULIMIDAE

1904. RMLP, 11:14, pl. 2, fig. 12.
1907*a*. AMNBA, 14:463 (Notostylopéen).
1914. NPRMP, 1(3):70 (Cretáceo Superior).
1949*b*. Parodiz, Physis, 20:183. *Megalobulimus hauthali* (Ihering).
1969. Parodiz, ACM, 40:175

= *Megalobulimus hauthali* (Ihering).

*Type Locality.*—Cañadón Blanco, between the rivers Senguer and Chubut.

*Type Material.*—Lectotype, #557, coll. Ameghino (not Hauthal); three paralectotypes, same data as lectotype.

*Stratigraphy.*—Casamayor Formation (Lower Eocene); also Musters Formation (for Colhue Huapi, Astraponotense of authors; Upper Eocene).

*Remarks.*—The lectotype was subsequently designated by Parodiz (1969:176). As in the case of *Strophocheilus chubutensis,* the collector of the type lot was C. Ameghino, not Hauthal as reported by Ihering (1914); the original label is in the handwriting of C. Ameghino, and indicates "capas de *Astraponotus,*" not *Notostylops. Strophocheilus avus* Parodiz (1949*b*) was synonymized with *S.* (*Megalobulimus*) *hauthali* (Ihering) by Parodiz (1969).

**hauthali,** 1907. *Turritella* TURRITELLIDAE

1907*a*. AMNBA, 14:163, pl. 5, fig. 22.
1914. NPRMP, 1(3):90 (Patagonico Inferior).

*Type Locality.*—Camarones, Chubut.
*Syntypes.*—#731, six specimens, coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This species has affinities with *Turritella malaspina* Ihering of the Salamanca Formation.

**huttoni,** 1907. *Cardium* CARDIIDAE

1907*a*. AMNBA, 14:291.

*Holotype.*—A single example sent to Ihering by F. W. Hutton; not in the collection.
*Type Locality.*—Waipara, New Zealand.
*Stratigraphy.*—Miocene.
*Remarks.*—Briefly diagnosed in the discussion of *Cardium philippi* Ihering. Ihering (1907*a*) proposed the new name *C. huttoni* for a specimen from the Miocene of Waipara, New Zealand, sent by F. W. Hutton and misidentified as *Cardium multiradiatum* Sowerby, 1833 (not Philippi, 1887). The type may have been returned to Hutton, but this is not certain. Also see *Cardium philippii* Ihering.

**improvisa,** 1914. *Columbella* (*Anachis*) COLUMBELLIDAE

1914. NPRMP, 1(3):106. Not figured (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.
*Syntypes.*—#861, seven specimens, coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**indecussata,** 1899. *Turritella breantiana* "var." TURRITELLIDAE

1897*b*. RMP, 2:288. *Turritella breantiana* d'Orbigny.
1899*a*. NJMGP, 2:26. *Turritella b.* "var." *indecussata.*
1907*a*. AMNBA, 14:164, pl. 5, fig. 23, *T. breantiana.*
1914. NPRMP, 1(3):89 refers to fig. 23 of 1907*a* as *T. indecussata.*

= *Turritella breantiana* d'Orbigny, 1847.
*Type Locality.*—Santa Cruz.
*Holotype.*—#4229, coll. J. Bicego, 1895 (by monotypy).
*Other Lots.*—#721, Manantial Salado, one specimen, coll. Ameghino; #722, Bajo de las Flechas, Santa Cruz, one specimen, coll. Ameghino; #723, Punta Casamayor, one specimen, coll. Ameghino; #724, Golfo San Jorge, one specimen, coll. Ameghino; #725, Cabo Tres Puntas, two specimens, coll. Ameghino; #726, Cañada de los Artilleros, four specimens, coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—There are no lots labelled as *T. breantiana* in the collection to compare with "var." *indecussata. Turritella iheringi* Cossmann, 1898, and *T. tricincta* Ihering, 1897 (not *T. tricincta* Hutton, 1873), are synonyms of *T. breantiana* d'Orbigny, 1847.

**indistincta,** 1897. *Mactra* MACTRIDAE

1897*b*. RMP, 2:262, text fig. 3 (Formação Santacruzense).
1907*a*. AMNBA, 14:320.

1914. NPRMP, 1(3):60 (Superpatagonico).

= *Mactra patagonica* d'Orbigny, 1846.

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Lectotype.*—#497, the only specimen that remains in the collection from the three valves reported by Ihering (1914), coll. Ameghino, 1905, here designated.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***jeguaensis,*** 1897. *Tellina* TELLINIDAE

1897*b*. RMP, 2:260, pl. 5, fig. 33 (Formação Santacruzense).
1907*a*. AMNBA, 14:315. ?"var." of "*striata*" Turton.
1914. NPRMP, 1(3):58 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Syntypes.*—#484, three specimens, coll. Ameghino, 1895.

*Other Lot.*—#485, Cañada de los Artilleros, one valve, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***jorgea,*** 1914. *Mactra* MACTRIDAE

1914. NPRMP, 1(3):60, pl. 2, fig. 6a–b (Patagonico Inferior).

*Type Locality.*—Southeast of Punta Nova (Nueva), Santa Cruz.

*Syntypes.*—#496, two specimens, crystalized into chalcedony, coll. Ameghino, 1905.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The hinge area of the specimens is missing, for which reason Ihering stated "duvidosa a sua posição systematica." The valves are shorter but with the apex higher than in *Mactra patagonica* d'Orbigny.

***jorgensis,*** 1907. *Bulla patagonica* "var." ?RETUSIDAE

1907*a*. AMNBA, 14:121. Not figured.
1914. NPRMP, 1(3):69 (Supra e Patagonico Medio).

= ?*Retusa patagonica* (Ihering), **new combination.**

*Locality.*—Punta Casamayor, Santa Cruz.

*Holotype.*—#554, coll. Ameghino, 1900 (by monotypy).

*Other Lot.*—#553, one specimen, Golfo San Jorge, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***jorgensis,*** 1907. *Cardium pisum* "var." CARDIIDAE

1907*a*. AMNBA, 14:294. Not figured.
1914. NPRMP, 1(3):48 (Patagonico Medio).

= *Cardium jorgensis* Ihering, 1907, **new status.**

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.

*Holotype.*—#405, coll. Ameghino, 1905 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***jorgensis,*** 1907. *Hadriania* MURICIDAE: OCENEBRINAE

1907*a*. AMNBA, 14:185, pl. 6, fig. 32a–b.
1914. NPRMP, 1(3):99 (Patagonico Medio a Inferior).

= *Crassilabrum jorgensis* (Ihering), **new combination.**

*Type Locality.*—Punta Casamayor, Santa Cruz.
*Holotype.*—#804, coll. Ameghino, 1900 (by monotypy).
*Other Lot.*—#805, two specimens, Río Chico, Chubut, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—The valid generic name is *Crassilabrum* Jousseaume, 1880. The replacement name *Antimurex* Cossmann, 1903, on grounds of preoccupation, is not valid because the presumed senior homonym *Crassilabrum* Megerle in Scudder (1882*a*:88 and 1882*b*:81) is a *nomen nudum*.

***jorgensis***, 1907. *Pecten* PECTINIDAE

1907*a*. AMNBA, 14:258, pl. 9, fig. 57a, d.
1914. NPRMP, 1(3):34. *Myochlamys* (Patagonico Medio).

= *Chlamys* (*Zygochlamys*) *jorgensis* (Ihering); see Morra (1985).
*Type Locality.*—Punta Casamayor, Santa Cruz.
*Syntypes.*—#274, one complete specimen plus one valve, coll. Ameghino.
*Other Lots.*—#275, same locality, one valve, coll. Ameghino, 1900; #276, Punta Nodales, three valves, coll. Ameghino, 1900; #277, Punta Nova (Nueva), one intact specimen and six other valves, coll. Ameghino, 1900; #278, Fondo del Bajo de San Julian, Santa Cruz, one valve, coll. Ameghino, 1900; #279, Río Chico, Chubut, one valve, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Found also at Cerro Otto by E. Feruglio.

***jorgensis***, 1907. *Pleurotoma* TURRIDAE

1907*a*. AMNBA, 14:220, pl. 7, fig. 47.
1914. NPRMP, 1(3):113 (Patagonico Inferior).

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.
*Holotype.*—#906, incomplete specimen, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—A more elongated species than *Pleurotoma santacruzensis* Ihering, otherwise very similar (both species based on a single specimen).

***jorgensis***, 1907. *Polynices* NATICIDAE

1907*a*. AMNBA, 14:158, pl. 5, fig. 19.
1914. NPRMP, 1(3):84 (Patagonico Medio).

= *Polynices famula* (Philippi).
*Type Locality.*—Cabo Tres Puntas, Santa Cruz.
*Holotype.*—#671, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Ihering (1907*a*:158) states, "Cette espèce paraît voisine de la *P. famula* Phil., mais . . . l'overture plus grand. . . ." In the unique specimen the aperture is broken, but all other visible characters are equal to *famula*,

***juliana***, 1907. *Arca* ARCIDAE

1907*a*. AMNBA, 14:238, pl. 7, fig. 5a–b.
1914. NPRMP, 1(3):18 (Patagonico Inferior).

= *Anadara juliana* (Ihering), **new combination.**
*Type Locality.*—Pan de Azucar, Santa Cruz (Formação Patagonica Inferior).

*Holotype.*—#115, single valve, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***juliana,*** 1907. *Bullinella* SCAPHANDRIDAE [CYLICHNIDAE]

1907*a*. AMNBA, 14:121, pl. 4, fig. 6.
1914. NPRMP, 1(3):69 (Superpatagonico).

= *Cylichna juliana* (Ihering).
*Type Locality.*—Cañada de los Artilleros, San Julian, Santa Cruz.
*Syntypes.*—#555, nine specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—*Bullinella* Newton, 1891 (= *Cylichna* Lovén, 1846). The peristoma in this species is very thick and marginated.

***juliana,*** 1907. *Calyptraea pileus* "var." CREPIDULIDAE

1907*a*. AMNBA, 14:148. Not figured.
1914. NPRMP, 1(3):83 (Patagonico Inferior).

= *Calyptraea pileus* Lamarck, 1822.
*Type Locality.*—Fondo del Bajo de San Julian, Santa Cruz.
*Holotype.*—#654, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—The description of the "var." was not comparative and insufficient for recognition of a distinct form, but the type specimen corresponds to *Calyptraea pileus* Lamarck ranging from the middle Tertiary to Recent. Do not confuse with *Calyptraea pileolus* d'Orbigny (= *Trochita americana* Gray).

***juliana,*** 1907. *Cerithiopsis* CERITHIOPSIDAE

1907*a*. AMNBA, 14:169, text fig. 7.
1914. NPRMP, 1(3):92 (Superpatagonico).

*Type Locality.*—Cañada de los Artilleros, Santa Cruz.
*Holotype.*—#750, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—In its large number of whorls and deep sutures it resembles the Recent *Cerithiopsis exilis* (C. B. Adams, 1850) which ranges from the Antilles to Brazil, but the whorls are less convex.

***juliana,*** 1907. *Corbula pulchella* CORBULIDAE

1907*a*. AMNBA, 14:322, pl. 12, fig. 81a–c.
1914. NPRMP, 1(3):62. *Corbula pulchella hatcheri* Ortmann (Superpatagonico, Patagonico Inferior).

= *Corbula hatcheri* Ortmann, 1900.
*Type Locality.*—Punta Nova (Nueva) Santa Cruz.
*Syntypes.*—#504, four specimens, coll. Ameghino, 1900.
*Other Lots.*—#503, Mouth of Santa Cruz River, one specimen of *C. hatcheri* received from Ortmann; #505, south of Colhue Huapi, one specimen plus one valve, coll. Ameghino, 1900; #506, Golfo San Jorge, five specimens, coll. Ameghino, 1900; #507, Camarones, 60 specimens, coll. Ameghino, 1900; #508, Cañada de los Artilleros, 15 specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species has similarities with the living *Corbula lyoni* Pilsbry; Recent, Buenos Aires and Uruguay.

***juliana,*** 1907. *Dentalium sulcosum* "var." DENTALIIDAE

1907*a.* AMNBA, 14:224.
1914. NPRMP, 1(3):67. *Dentalium sulcosum julianum* (emend.) (Patagonico Superior).

*Type Locality.*—Cañada de los Artilleros, Santa Cruz.
*Syntypes.*—#541, ten specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—See *Dentalium sulcosum camaronesis.*

***juliana,*** 1907. *Myochlamys* PECTINIDAE

1902. Ameghino, ASCA, 54:224 (*in litteris* as *Chlamys*).
1907*a.* AMNBA, 14:253, pl. 8, fig. 56a–b. *Myochlamys.*
1914. NPRMP, 1(3):34 (Patagonico Inferior, Medio).

= *Chlamys juliana* (Ihering).
*Type Locality.*—Southeast of Punta Nova (Nueva), Santa Cruz.
*Holotype.*—#280, coll. Ameghino, 1900 (by monotypy).
*Other Lots.*—#281, Pan de Azucar, one valve, coll. Ameghino, 1900; #282, Punta Casamayor, one valve, coll. Ameghino, 1900; #283, north of Río Seco and San Julian, Santa Cruz, one valve, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***juliana,*** 1907. *Neoimbricaria quemadensis* "var." MARGINELLIDAE

1907*a.* AMNBA, 14:199. Not figured.
1914. NPRMP, 1(3):108 (Superpatagonico).

= *Neoimbricaria quemadensis* (Ihering).
*Type Locality.*—San Julian, Santa Cruz.
*Syntypes.*—#871, 15 specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This form was diagnosed within the discussion of *N. quemadensis* as having an obsolete spiral sulcus, but this is a character extremely variable in *quemadensis* and other species. A synonym of this species is *N. gracilior* (Ihering).

***juliana,*** 1907. *Urosalpinx elegans* "var." MURICIDAE: OCENEBRINAE

1907*a.* AMNBA, 14:187, pl. 6, fig. 34a–b.
1914. NPRMP, 1(3):98. *Urosalpinx elegans* Ortmann (Superpatagonico).

= *Ocenebra* (*Ocinebrina*) *elegans* (Ortmann), **new combination.**
*Type Locality.*—Cañada de los Artilleros, Santa Cruz.
*Syntypes.*—#799, ten specimens, coll. Ameghino, 1900.
*Other Lot.*—#798, Yegua Quemada, Santa Cruz, two specimens, C. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—The species *U. elegans* Ortmann does not belong in *Urosalpinx* but rather with *Ocinebrina* Jousseaume, 1880. What Ihering describes as "var." *juliana* are juveniles and not distinct from *elegans.*

***julianum,*** 1907. *Pitar* VENERIDAE

1907*a*. AMNBA, 14:302, pl. 11, fig. 74a–b.
1914. NPRMP, 1(3):51 (Patagonico Inferior).

*Type Locality.*—Bajo de San Julian (in the original "Baie de San Julian") Santa Cruz.

*Syntypes.*—#424, three fragments of valves, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The incomplete valves do not show well the configuration of the shells, but from the umbo and cardinal area they are clearly a species of *Pitar*. E. Feruglio (1949–1950) mentions the species for Río Turbo.

***julianus,*** 1907. *Vermetus* ANNELIDA: POLYCHAETA

1907*a*. AMNBA, 14:166, pl. 5, fig. 6.
1914. NPRMP, 1(3):92 (Patagonico Inferior).

*Type Locality.*—Manantial Salado, San Julian.

*Syntypes.*—#745, a conglomerate with several individuals.

*Other Lots.*—#746, Pan de Azucar, Santa Cruz, numerous in rock, coll. Ameghino, 1900; #747, Cañada de los Artilleros, three specimens, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—These are not molluscs but probably tubes of polychaetes (Annelida).

***juliensis,*** 1907. *Pododesmus* ANOMIIDAE

1907*a*. AMNBA, 14:267, pl. 10, fig. 65a–b.
1914. NPRMP, 1(3):27 (Patagonico Inferior).

*Type Locality.*—Pan de Azucar, Santa Cruz.

*Syntypes.*—#217, Manantial Salado, six valves, coll. Ameghino, 1900; #219, Cabo Tres Puntas, Santa Cruz, one valve, coll. Ameghino, 1905.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***kokeni,*** 1899. *Crassatella* CRASSATELLIDAE

1899*a*. NJMGP, 2:17, pl. 2, fig. 2.
1907*a*. AMNBA, 14:279. *Crassatellites*.
1914. NPRMP, 1(3):40 (Patagonico Inferior).

*Type Locality.*—Santa Cruz.

*Syntypes.*—#325, five valves, coll. J. Bicego.

*Other Lots.*—#326, Cabo Tres Puntas, three valves, coll. Ameghino, 1900; #327, Punta Casamayor, two specimens, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***lacustris,*** 1907. *Hadriania* MURICIDAE: OCENEBRINAE

1907*a*. AMNBA, 14:185. New name for material misidentified as *Urosalpinx pyriformis* (Ihering) in Ortmann (1902:220, pl. 34, fig. 11), not *Trophon pyriformis* Ihering, 1897*b*.
1914. NPRMP, 1(3):99. *Hadriania hatcheri* Ortmann (Patagonico Medio).

= *Crassilabrum hatcheri* (Ortmann, 1900).

*Other Lots.*—#802, Punta Casamayor, one specimen, C. Ameghino, 1900.; #803, Punta Nodales, one specimen, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**lahillei,** 1907. *Calliostoma* TROCHIDAE

1907*a*. AMNBA, 14:440, pl. 17, fig. 118 ("Pampeano").

= *Calliostoma jucundum* (Gould, 1849).

*Type Locality.*—Punta Villarino, Chubut.

*Type.*—Not in the collection.

*Remarks.*—Included by Ihering among the species from the "Pampeano" (Pleistocene), this is not a fossil.

**lahillei,** 1907. *Pitar* VENERIDAE

1907*a*. AMNBA, 14:303, pl. 11, fig. 75a–b. Not fully described but reported as a new, Recent species in the discussion of *Pitar julianum.*

*Remarks.*—This form, being Recent, is not in the collection but the figures show a higher shell than the living *Pitar rostrata* (Koch). As the latter species is extremely variable, *P. lahillei* may be only an individual variation. See *Pitar lahillei ortmanni.*

**laziarina,** 1907. *Amiantis* VENERIDAE

1903. Ameghino, ASCA, 54:190. *Cytherea laziarina* Ihering, *in litteris.*
1907*a*. AMNBA, 14:414, pl. 16, fig. 110. *Amiantis.*
1914. NPRMP, 1(3):54 (Tehuelche Medio).

*Type Locality.*—Sierra Laziar, Santa Cruz.

*Syntypes.*—#431, "*Chione*" *laziarina* on label, seven valves, coll. Ameghino, 1900.

*Stratigraphy.*—Araucanean Formation (Lower Pliocene).

**laziarina,** 1907. *Myochlamys* PECTINIDAE

1897*b*. RMP, 2:323. *Pecten* aff. *centralis* Sowerby.
1902. Ameghino, ASCA, 54:190. *Pseudoamusium laziarium, nomen nudum.*
1907*a*. AMNBA, 14:409, pl. 16, fig. 104a–b.
1914. NPRMP, 1(3):35 (Formação Araucana).

= *Chlamys laziarina* (Ihering).

*Type Locality.*—Sierra Laziar, Santa Cruz.

*Syntypes.*—#284, four valves, coll. Ameghino, 1900; #285, Bajo de la Pava, Santa Cruz, one valve, coll. Ameghino, 1897.

*Stratigraphy.*—Araucanean Formation (Lower Pliocene).

**laziarium,** 1907. *Calliostoma* TROCHIDAE

1907*a*. AMNBA, 14:399, pl. 16, fig. 105a–b.
1914. NPRMP, 1(3):78 (Formação Araucana).

*Type Locality.*—Sierra Laziar, Santa Cruz.

*Holotype.*—#606, coll. Ameghino, 1900 (by monotypy).

*Stratigraphy.*—Araucanean Formation (Lower Pliocene).

**levuana,** 1907. *Calyptraea* CREPIDULIDAE

1907*a*. AMNBA, 14:523. New name for *Trochita araucana* in Philippi (1887:87), not *Trochita araucana* Lesson, 1831.
1914. NPRMP, 1(3):84. *Calyptraea pueyrredona* (Patagonico).

= *Calyptraea pueyrredona* Ihering.

*Type Locality.*—Lago Pueyrredón, Santa Cruz.

*Syntypes.*—#666, two specimens, Lagoa Pueyrredón, coll. Hatcher, received from Ortmann as *Galerus araucanus,* labelled as "cotypes."

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Ihering mistakenly proposed two new names, *C. levuana* and *C. pueyrredona,* for the species misidentified by Philippi (1887) as *Trochita araucana* Lesson. The name *C. levuana* Ihering is therefore a junior objective synonym and Ihering did not list it in his 1914 catalogue, but placed the corresponding lot under *C. pueyrredona.* There are five other lots of *Calyptraea* sp. similar to lot #666 in the Ihering Collection without indication of locality.

***longior,*** 1897. *Crassatella* CRASSATELLIDAE

1897*b*. RMP, 2:247, pl. 5, fig. 34, pl. 6, fig. 37 (Formação Santacruzense).
1902. Ortmann, p. 125, pl. 27, fig. 2. *Crassatellites.*
1907*a*. AMNBA, 14:272. *Crassatellites.*
1914. NPRMP, 1(3):40 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Holotype.*—#328, one valve, coll. Ameghino, 1900 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Other lot reported by Ihering (1914) from Punta Casamayor is missing from the collection. According to Feruglio (1949–1950), *C. longior* has affinities to *Crassatella chubutiensis* Feruglio. *Crassatellites* Krueger, 1823, is an unavailable name (= *Crassatella* Lamarck, 1799).

***luciferus,*** 1904. *Helcioniscus* PATELLIDAE: NACELLINAE

1904. RMLP, 11:235, fig. 7–8.
1907*a*. AMNBA, 14:123 (araucaniense).
1914. NPRMP, 1(3):71 (Araucano ou Pampeana).

= *Cellana lucifera* (Ihering).

*Type Locality.*—Río Deseado, Santa Cruz.

*Syntypes.*—#563, two specimens, coll. S. Roth.

*Stratigraphy.*—"Deseado beds" coeval and equivalent to the Belgrano Formation in the north (Lower Pleistocene).

*Remarks.*—*Helcioniscus* Dall, 1871 (= *Cellana* H. Adams, 1869).

***lujanensis,*** 1907. *Diplodon charruanus* HYRIIDAE

1907*a*. AMNBA, 14:468. Not figured.
1914. NPRMP, 1(3):36 ("Pampeano superior").

= *Diplodon delodontus* (Lamarck, 1819).

*Type Locality.*—Luján, Buenos Aires Province ("Post-Pampeano").

*Syntypes.*—One specimen marked "type" exists at the Museum Senckenberg, Frankfurt; in the Ihering Collection there are two other valves (#294), both also marked as "type." Neither of these are *charruanus.*

*Stratigraphy.*—Upper Buenos Aires Formation (Pleistocene).

*Remarks.*—See Parodiz (1973). I have observed fossil *Diplodon* specimens, from Luján and other places, in strata indicated as "Lujanense" (Upper Pleistocene) and none of them are similar to *D. charruanus* (d'Orbigny), but belong to various species including *D. delodontus* (Lamarck), *D. piceus* (Lea), and *D. rhu-*

*acoicus* (d'Orbigny). See Parodiz, 1968:7. *Unio charruanus* "var." *lujanensis* Döring (1884:328) is a *nomen nudum.*

***madryna,*** 1907. *Ostrea* OSTREIDAE

1907*a*. AMNBA, 14:407, pl. 15, fig. 101a–d.
1914. NPRMP, 1(3):25 (Formação Araucana).

*Type Locality.*—Puerto Madryn, Bahía Nueva, Chubut.

*Syntypes.*—#197, seven isolated valves, coll. Ameghino, 1900.

*Stratigraphy.*—Araucanean Formation (Pliocene).

*Remarks.*—*Ostrea madryna* is intermediate between *O. hatcheri* Ortmann and *O. orbignyi* Ihering.

***magellanica,*** 1899. *Pinna semicostata* "var." PINNIDAE

1899*a*. NJMGP, 2:213. *Pinna.*
1907*a*. AMNBA, 14:242. *Atrina magellanica.*
1914. NPRMP, 1(3):19 (Patagonico Medio).

= *Atrina magellanica* (Ihering).

*Type Locality.*—Santa Cruz.

*Syntypes.*—#131, ten valves (fragments); #132, Cabo Tres Puntas, two incomplete specimens, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene); also Magellanian Formation (Lower Oligocene) (Feruglio, 1949–1950, at Epuyen and Arroyo Nireco).

***magellanica,*** 1907. *Ringicula* RINGICULIDAE

1907*a*. AMNBA, 14:120, pl. 4, fig. 5.
1914. NPRMP, 1(3):69 (Patagonico Inferior).

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#550, two incomplete specimens, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species is similar to the Recent *R. semistriata* (d'Orbigny), but with fewer whorls and larger shell.

***major,*** 1899. *Cancellaria gracilis* "var." CANCELLARIIDAE

1899*a*. NJMGP, 2:35, pl. 2, fig. 10.
1907*a*. AMNBA, 14:215, pl. 7, fig. 43. *Sveltia major.*
1914. NPRMP, 1(3):111 (Superpatagonico).

= *Naronia* (*Sveltia*) *major* (Ihering), **new combination.**

*Type Locality.*—Santa Cruz.

*Holotype.*—#898, in clayish rock containing specimens of *Struthiolaria ameghinoi,* coll. J. Bicego, 1895 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***malaspina,*** 1903. *Turritella* TURRITELLIDAE

1903. AMNBA, 9:217, pl. 2, fig. 13.
1907*a*. AMNBA, 14:48.
1914. NPRMP, 1(3):91 (Salamanqueano).

*Type Locality.*—Malaspina, Chubut.

*Syntypes.*—#735, three specimens, coll. Ameghino, 1900.

*Stratigraphy.*—Salamanca Formation (Paleocene).

*Remarks.*—Feruglio (1949–1950) mentioned the species from Cañadón Perdido, north of Comodoro Rivadavia. It has affinities with *T. australis* Ihering of the Patagonian Formation.

***Marginella*** sp. MARGINELLIDAE

1914. NPRMP, 1(3):106 (Formação Entreriana).

*Locality.*—La Paz, Entre Rios.

*Specimens.*—#862, cast of an unidentifiable species, coll. S. Roth.

*Stratigraphy.*—Paraná Formation (Upper Miocene).

***Marginella*** (*Volvaria*) sp. MARGINELLIDAE

1914. NPRMP, 1(3):107.

*Locality.*—Cabo Tres Puntas, Santa Cruz.

*Specimen.*—#864, one specimen, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Volvaria* Jousseaume, 1875 (= *Volvarina* Hinds, 1844).

***matanzasense,*** 1907. *Dentalium* ?DENTALIIDAE

1907*a*. AMNBA, 14:224. New name for *Dentalium sulcosum* in Philippi, 1887, not *D. sulcosum* Sowerby, 1846.

1914. NPRMP, 1(3):66 ("Terciario antiguo").

*Type Locality.*—Matanzas, Chile.

*Type.*—#531, one specimen received from R. A. Philippi.

*Stratigraphy.*—Probably Navidad Formation (Miocene).

***matthewi,*** 1914. *Siphonalia* FASCIOLARIIDAE: FUSININAE

1914. NPRMP, 1(3):102, pl. 3, fig. 14 (Patagonico).

= *Fusinus subrectum* (Ihering).

*Type Locality.*—Golfo San Jorge, Santa Cruz.

*Holotype.*—#845a, one cast, distorted by pressure, with fragments of the shell, coll. Ameghino (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species and *S. nodocincta* Ihering are both synonyms of *Fusinus subrectum* (Ihering).

***mendozana,*** 1907. *Exogyra ostracina* OSTREIDAE

1907*a*. AMNBA, 14:37, text fig. 1 (étage Rocanéen).

= *Exogyra mendozana* Ihering.

*Type Locality.*—"Territorios Nacionales al Sud de Mendoza"; = present Neuquen Province, or Río Negro.

*Holotype.*—#4455 (by monotypy).

*Stratigraphy.*—Roca Formation (Paleocene).

*Remarks.*—Label data on the type: "from Fl. Ameghino collection found 15 April [1882]." Not listed in catalogue (Ihering, 1914). The specimen was found together with *Gryphaea burckhardti* Böhm which is known from the Roca Formation.

***meridionalis,*** 1897. *Dosinia* VENERIDAE

1897*b*. RMP, 2:256, pl. 6, fig. 41 (Formação Santacruzense).
1907*a*. AMNBA, 14:300.
1914. NPRMP, 1(3):51 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Syntypes.*—#419, five valves, coll. Ameghino; #420, Cañada de los Artilleros, one small valve, coll. Ameghino; #421, Paraná, three casts and fragments of valves, coll. J. Bicego, 1895.

*Stratigraphy.*—Patagonian Formation (Lower Miocene); Paraná Formation (Upper Miocene); Araucanean Formation (Pliocene); Recent.

***militaris,*** 1907. *Calliostoma* TROCHIDAE

1907*a*. AMNBA, 14:438, pl. 17, fig. 116 (Pampeano).

*Type Locality.*—Puerto Militar (now Puerto Belgrano), Prov. Buenos Aires).

*Syntypes.*—Described from two specimens; neither are in the Ihering Collection or his 1914 catalogue under this name; the lot used in the description of *C. militaris* is under *C. dalli* in the Ihering Collection, labelled with an incorrect locality (Deseado). Priority of *C. militaris* over *C. dalli* follows Clench and Turner (1960:75).

*Stratigraphy.*—Belgrano Formation (Pleistocene).

***militaris,*** 1907. *Tornatina* SCAPHANDRIDAE [CYLICHNIDAE]

1907*a*. AMNBA, 14:435, pl. 17, fig. 133 (Pampeano).

= *Tornatina candei* (d'Orbigny, 1841). See Carcelles and Parodiz, 1938.

*Type Locality.*—Puerto Militar (now Puerto Belgrano), Prov. Buenos Aires.

*Syntypes.*—Two specimens, coll. Ameghino.

*Stratigraphy.*—Belgrano Formation (Pleistocene); Recent.

***monoceros,*** 1907. *Trophon* MURICIDAE

1907*a*. AMNBA, 14:183, pl. 14, fig. 92.
1914. NPRMP, 1(3):98. *Entacanthus* (Patagonico).

= *Thais* (*Stramonita*) *monoceros* (Ihering), **new combination.**

*Type Locality.*—Santa Cruz.

*Syntypes.*—#801, two specimens, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***montenus,*** 1907. *Trophon varians* MURICIDAE

1907*a*. AMNBA, 14:404. Not figured.
1914. NPRMP, 1(3):101 (Formação Araucana).

= *Trophon varians* (d'Orbigny, 1841).

*Type Locality.*—Monte Espejo, Santa Cruz.

*Syntypes.*—#834, three specimens.

*Stratigraphy.*—Araucanean Formation (Pliocene).

*Remarks.*—In the original description two specimens were cited, but only one specimen was noted in the 1914 catalogue.

***multicoronatus,*** 1907. *Vermetus* VERMETIDAE

1907*a*. AMNBA, 14:167, pl. 5, fig. 27.
1914. NPRMP, 1(3):92 (Patagonico Inferior).

= *Dendropoma multicoronatus* (Ihering), **new combination.**

*Type Locality.*—North of Río Seco (this may be the same as Monte Espejo).

*Syntypes.*—#748, three specimens (Río Seco and San Julian mixed).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The fragments of the tubes seem to belong in the genus *Dendropoma* Mörch, 1861 (*nomina conservanda* over *Spiroglyphus* Daudin, 1800; *Siphonium* Gray, 1847. The only species known in the southwestern Atlantic is *D. irregularis* (d'Orbigny).

***multicostata,*** 1897. *Cucullaea* CUCULLAEIDAE

1897*b*. RMP, 2:240, pl. 4, 20 and pl. 5, fig. 29.
1899*a*. NJMGP, 2:13.
1904. RMLP, 11:9, pl. 1, fig. 2–4.
1907*a*. AMNBA, 14:232.
1914. NPRMP, 1(3):15 (Patagonico Inferior and Superpatagonico).

*Type Locality.*—La Cueva, Santa Cruz.

*Holotype.*—#93, coll. Ameghino (by monotypy).

*Other Lots.*—#94, Santa Cruz, three valves, coll. Bicego, 1897; #95, Cañada de los Artilleros, one valve, coll. Ameghino, 1900; #96, Punta Casamayor, six complete specimens and five valves, coll. Ameghino, 1900; #97, Sierra de los Baguales, four specimens, coll. Hauthal.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***Myochlamys,*** 1907. PECTINIDAE

1907*a*. AMNBA, 14:106, 251. New genus.

*Remarks,*—Genus-group name proposed to replace *Chlamys* Röding, 1798, which was thought to be invalid. The type species of *Chlamys* Röding is *Pecten islandicus* Müller, 1776, by subsequent designation of Hermannsen, 1846, and that species would also be the type species of *Myochlamys* Ihering. Since names from the Bolten Collection are now accepted by the ICZN as authored by Röding (1798), *Myochlamys* Ihering is an unnecessary replacement name and junior objective synonym of *Chlamys* Röding. In any event, *Myochlamys* Ihering, 1907, is preoccupied by *Myochlamys* Fairmaire, 1876 (Insecta: Coleoptera).

***necocheanus,*** 1907. *Trophon* MURICIDAE

1907*a*. AMNBA, 14:404, pl. 14, fig. 106 (Formação Araucano).
1914. NPRMP, 1(3):100. *Trophon laciniatus necocheanus.*

= *Trophon* (*Austrotrophon*) *lamellosus* (Gmelin, 1791).

*Type Locality.*—Necochea, Prov. of Buenos Aires.

*Type.*—Not in the collection.

*Stratigraphy.*—Araucanean Formation (Pliocene); Recent.

*Remarks.*—Lot #823 contains two specimens from Sierra Laziar and was labelled by Ihering as "Type," but this does not agree with the type locality published in the original description. The two specimens are juveniles of *T. lamellosus* (Gmelin). Feruglio (1949–1950:268) reported the affinities of *T. necocheanus* Ihering with *T. disparides* Wilckens (1911) from Seymour Island in the Antarctic.

***negroina,*** 1907. *Chlamys patagonensis* "var." PECTINIDAE

1907*a*. AMNBA, 14:22, pl. 3, fig. 11 (étage Rocanéen).

= *Chlamys patagonensis* (d'Orbigny, 1842).

*Type Locality.*—Río Negro, kilometers 1216 and 1217.

*Type.*—Not in the collection and not listed in the 1914 catalogue.

*Stratigraphy.*—?Roca Formation.

*Remarks.*—Ihering (1907*a*) said he could not "Juger définitivement de la relation de cette forme avec *Ch. patagonensis* de la formation patagonienne."

***neuquena,*** 1907. *Ostrea* OSTREIDAE

1899*b*. ASCA, 47:64. *Ostrea hemispherica* d'Orbigny.
1907*a*. AMNBA, 14:45, text fig. 3a–c.
1914. NPRMP, 1(3):22 (Cretáceo Superior).

*Type Locality.*—Roca, Río Negro (not Neuquen as the species-group name suggests).

*Syntypes.*—Those specimens figured in Ihering (1907*a*:text fig. 3a–c) including one marked #151.

*Other Lots.*—#152, San Juan, Puerto Santa Ana, Misiones, northeast Argentina, fragment reported from "Formación Guaranitica" of uncertain identification; #153, Roca, Río Negro; #154, Malaspina, Santa Cruz, five valves; #155, "Cretáceo de Río Negro Kilometro 1216," two valves, coll. Ameghino, 1904.

*Stratigraphy.*—Roca and Salamanca formations (Paleocene).

*Remarks.*—E. Feruglio also found the species in the "Salamanqueano" of the valley of the Río Chico. The valves from Misiones are fragments of *O. guaranitica* Ihering; those from kilometer 1216 on the Río Negro were probably from or near Roca. *Ostrea hemispherica capa* Ihering and *O. h. paca* Ihering are synonyms of this name.

***nodocincta,*** 1907. *Siphonalia* FASCIOLARIIDAE: FUSININAE

1897*b*. RMP, 2:3299. *Siphonalia* aff. *nodosa* Martens.
1907*a*. AMNBA, 14:193, pl. 6, fig. 37. *Siphonalia nodocincta.*
1914. NPRMP, 1(3):102 (Patagonico Medio).

= *Fusinus subrectus* (Ihering).

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.

*Holotype.*—#841, coll. Ameghino, 1900 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The type specimen has only the upper part of the aperture preserved and the siphonal canal is missing. On the Argentine coast (Recent) the genus is represented by *Fusinus frenguelli* (Carcelles, 1953). The species most similar to *F. subrectus* is *F. brasiliensis* (Grabau, 1903).

***nodosoplicatus,*** 1897. *Pecten* PECTINIDAE

1897*b*. RMP, 2:227, pl. 5, fig. 36 (Formação Santacruzense).
1907*a*. AMNBA, 14:256. *Myochlamys.*
1914. NPRMP, 1(3):31 (Patagonico Medio–Superior).

= *Chlamys* (*Zygochlamys*) *nodosoplicatus* (Ihering); see Morra (1985).

*Type Locality.*—La Cueva, Santa Cruz.

*Syntypes.*—#251, four valves, coll. Ameghino, 1900.

*Other Lots.*—#252, Yegua Quemada, Santa Cruz, five valves, coll. Ameghino, 1900; #253, Monte Espejo, Santa Cruz, one valve, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The name was first given in Ihering (1897*b*:227) as *Pecten nodosopiicatus* [sic], an incorrect original spelling for *P. nodosoplicatus.*

***nucleus,*** 1899. *Glycimeris* [sic] HIATELLIDAE

1899*a*. NJMGP, 2:23, pl. 1, fig. 7.
1907*a*. AMNBA, 14:326, pl. 12, fig. 85a–b. *Panopaea* [sic].
1914. NPRMP, 1(3):62 (Patagonico).

= *Panopea nucleus* (Ihering).

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.

*Holotype.*—#515, coll. Ameghino (by monotypy).

*Other Lots.*—#513, Santa Cruz, one specimen, coll. J. Bicego, 1895, reported by Ihering (1914) as type but is not from type locality; #514, Corral Foyel, one cast, coll. Hauthal; #516, Sierra de los Baguales, one cast, coll. Hauthal; #4464, San Julian, coll. Ameghino; #2480, Río Foyel, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species is related to *Panopea nucleoides* Wilckens (1911) from the Tertiary of Antarctica.

***observationis,*** 1907. *Turbonilla* PYRAMIDELLIDAE

1907*a*. AMNBA, 14:144. New name for one of the specimens of *Turbonilla cuevensis* misidentified by Ortmann (1902:174, pl. 33, fig. 8a–b), not *Turbonilla cuevensis* Ihering, 1897*b*.

*Type Locality.*—Monte Observación, Santa Cruz.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—A questionable species; Ihering (1907*a*:144) states, "Espèce intermediaire entre *T. cuevensis* and *T. Iheringi.*"

***observatoria,*** 1907. *Cancellaria gracilis* "var." CANCELLARIIDAE

1907*a*. AMNBA, 14:214. New name for specimens of *C. gracilis* as figured by Ortmann (1902:235, pl. 36, fig. 3a–b).

= *Cancellaria gracilis* (Ihering).

*Type Locality.*—Monte Observación, Santa Cruz.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—No description; in the discussion of *Cancellaria gracilis* Ihering as "différente par les caracteres de l'overture"; these characters are insufficient to identify the form.

***observatoria,*** 1907. *Nucula* NUCULIDAE

1907*a*. AMNBA, 14:227, pl. 7, fig. 49a–b.
1914. NPRMP, 1(3):13 (Patagonico Superior).

*Type Locality.*—Monte Observación, Santa Cruz.

*Holotype.*—#70, one specimen within a lot of *Nucula semiornata* d'Orbigny received from Ortmann (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Ihering (1914:13) gives the type locality as Camarones from specimens collected by C. Ameghino in 1900, but the original description (Ihering, 1907*a*:227) states the type locality was Monte Observación from which the species derives its name. *Nucula semiornata* d'Orbigny, 1846, of which *N. reticularis* Ortmann, 1902, is a synonym, is also found at both localities.

**octocostatum,** 1897. *Dentalium* DENTALIIDAE

1897*b*. RMP, 2:266, pl. 4, fig. 16 (Formação Santacruzense).
1907*a*. AMNBA, 14:225. *Dentalium octocostellatum* Pilsbry and Sharp.
1914. NPRMP, 1(3):66 (Patagonico Inferior–Superior).

= *Dentalium octocostellatum* Pilsbry and Sharp, 1898.

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Syntypes.*—#532, nine specimens, coll. Ameghino, 1894.

*Other Lots.*—#533, 24 specimens, Camarones, coll. Ameghino, 1900; #534, Cañada de los Artilleros, 100 specimens, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Dentalium octocostellatum* Pilsbry and Sharp (1898:211) replaced *D. octocostatum* Ihering which was preoccupied by *Dentalium octocostatum* Fraas, 1867.

***Odontogryphaea,*** 1903. GRYPHAEIDAE

1903. AMNBA, 9:194. New subgenus of *Gryphaea* Lamarck.
1907*a*. AMNBA, 14:43, 44.
1945. Stenzel, BGSA, 56(12, pt. 2):1202.

*Type Species.*—*Gryphaea rostrigera* Ihering, by subsequent designation of Stenzel, 1945.

*Stratigraphy.*—Salamanca Formation (Paleocene).

*Remarks.*—Ihering made *Odontogryphaea* a subgenus of *Gryphaea* Lamarck for the early Tertiary species with crenulated margins. Stenzel considered it a genus, with *Gryphaea rostrigera* Ihering as the type species. According to Stenzel *Odontogryphaea* is convergent with *Gryphaea* but not closely related. Outside Patagonia *Odontogryphaea* is known from the Lower Eocene of the southeastern United States (*O. thirsae* [Gabb, 1862]; see Palmer and Brann, 1965:225) and from the Paleocene of France and India (Stenzel, 1945).

**orbignyi,** 1897. *Ostrea* OSTREIDAE

1897*b*. RMP, 2:222, pl. 9, fig. 52 (Formação Santacruzense).
1907*a*. AMNBA, 14:17, pl. 2, fig. 9 (spelled *d'orbignyi*).
1914. NPRMP, 1(3):24 (Patagonico and Superpatagonico).

*Type Locality.*—La Cueva, Santa Cruz.

*Syntypes.*—#186, six valves, coll. Ameghino, 1904.

*Other Lots.*—#187, Santa Cruz, two valves, coll. Ameghino; #188, Yegua Quemada, one valve, coll. Ameghino; #189, Sierra de los Baguales, five valves, coll. Hauthal; #190, Deseado, one valve, coll. S. Roth; #191, Deseado, three valves, coll. S. Roth.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**ortmanni,** 1907. *Leda* NUCULANIDAE

1907*a*. AMNBA, 14:229. New name for *Leda oxyrhyncha* in Ortmann (1902:83, pl. 23, fig. 2a–b), not *Leda oxyrhyncha* Philippi, 1887.

= *Nuculana ortmanni* (Ihering).

*Type Locality.*—Santa Cruz and Río Negro (Ortmann).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—See *Leda camaronesia* for note on *Nuculana.*

**ortmanni,** 1899. *Lucina* LUCINIDAE

1899*a*. NJMGP, 2:18, pl. 2, fig. 3.
1902. Ortmann, p. 131, pl. 27, fig. 5.
1907*a*. AMNBA, 14:289, *Phacoides.*
1914. NPRMP, 1(3):46 (Patagonico Inferior–Medio).

= *Lucina ortmanni* (Ihering).
*Type Locality.*—Cabo Tres Puntas, Santa Cruz.
*Syntypes.*—#384, five valves, coll. Ameghino.
*Other Lots.*—#382, Santa Cruz, five specimens (labelled "typo"); #383, Bajo de San Julian, one specimen, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**ortmanni,** 1907. *Marcia* VENERIDAE

1907*a*. AMNBA, 14:304. New name for *Venus navidadis* in Ortmann (1902:141, pl. 27, fig. 12), not *Venus navidadis* Philippi, 1887.
1914. NPRMP, 1(3):52. *Marcia navidadis* Philippi.

= *Samarangia navidadis* (Philippi).
*Type Locality.*—Talcahuano, Chile (Philippi, 1887).
*Type.*—#433, one specimen, received from the Valparaiso Museum.
*Stratigraphy.*—Tertiary Inferior of Chile (Philippi, 1887).

**ortmanni,** 1907. *Pitar lahillei* VENERIDAE

1907*a*. AMNBA, 14:453, pl. 18, fig. 124a–b.
1914. NPRMP, 1(3):51 (Pampeano).

= *Pitar rostrata* (Koch, 1844).
*Type Locality.*—L'ouest de Cabo Tres Puntas, Santa Cruz (probably Sierra Laziar).
*Syntypes.*—#425, nine valves, coll. Ameghino, 1900.
*Other Lot.*—#426, one valve, coll. Ameghino, 1900.
*Stratigraphy.*—Araucanean Formation (Pliocene).
*Remarks.*—Feruglio (1949–1950, vol. 3:81) reports the species from the Pliocene of San Julian. It is common in the Recent. See *Pitar lahillei* Ihering.

**ortmanni,** 1907. *Polynices* NATICIDAE

1907*a*. AMNBA, 14:157, pl. 5, fig. 18. New name for *Natica ovoidea* in Ortmann (1902:380), not *Natica ovoidea* Philippi, 1887.
1914. NPRMP, 1(3):85 (Patagonico–Superpatagonico).

= *Polynices famula* (Philippi).
*Type Locality.*—Santa Cruz (specimens figured by both Ortmann and Ihering).
*Other Lots.*—#676, Yegua Quemada, coll. Ameghino, 1900; #677, two specimens, coll. J. Bicego, 1897.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—*Polynices jorgensis* Ihering is also a synonym.

***ortmanni,*** 1907. *Tellina* PSAMMOBIIDAE

1907*a*. AMNBA, 14:313, 315. New name for *Tellina tehuelcha* in Ortmann (1902:147, pl. 29, fig. 3), not *Tellina tehuelcha* Ihering, 1899.
1914. NPRMP, 1(3):58. *Sanguinolaria tehuelcha* (Ihering).

= *Sanguinolaria tehuelcha* (Ihering).
*Type Locality.*—Shell Gap at Río Chico, Santa Cruz (Ortmann).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—There is no material in the Ihering Collection under this name, and only the type lot is curated under the corresponding *Tellina tehuelcha* Ihering.

***ortmanni,*** 1907. *Urosalpinx* MURICIDAE

1907*a*. AMNBA, 14:188. New name for material misidentified as *Urosalpinx leucostomoides* (Sowerby) in Cossmann (1899*a*:pl. 10, fig. 7), not *Triton leucostomoides* Sowerby (1846:383, fig. 60).
1914. NPRMP, 1(3):98 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.
*Syntypes.*—#800, four specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This species resembles *Urosalpinx archipatagonica* Ihering from the same locality. It is synonymous with *Urosalpinx* "*pleurotomoides*" Cossmann (1903:50), *lapsus calami* and misidentification of *U. leucostomoides* (Sowerby).

***osborni,*** 1914. *Gibbula* ?TROCHIDAE

1914. NPRMP, 1(3):75, pl. 3, fig. 11 (Patagonico Inferior).

*Type Locality.*—Pan de Azucar, Santa Cruz.
*Holotype.*—#590, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—It may not be a *Gibbula*; it is more *Turbo*-like; probably a new genus.

***paca,*** 1907. *Ostrea hemisphaerica* [sic] "var." OSTREIDAE

1907*a*. AMNBA, 14:12. Not figured (Roca).
1914. NPRMP, 1(3):22. *Ostrea neuquena paca* (Roca, Cretáceo Superior).

= *Ostrea neuquena* Ihering.
*Type Locality.*—Roca, Río Negro.
*Syntypes.*—#156, three valves, coll. A. Romero, 1903.
*Stratigraphy.*—Roca Formation (Paleocene).

***pachychila,*** 1907. *Bulla* BULLIDAE

1907*a*. AMNBA, 14:363. New name for *Bulla* aff. *elegans* in Borchert (1901:47, pl. 4, fig. 7), not *Bulla elegans* Gray, 1825 (= *Haminea guildingi* [Sowerby]).

*Type Locality.*—Paraná, Entre Rios.
*Stratigraphy.*—Paraná Formation (Upper Miocene).
*Remarks.*—Ihering (1907*a*:363) states, "La détermination de Borchert est conséquent inexacte, non seulement pour l'espèce, mais aussi pour le genre au sousgenre. . .."

***palaeopatagonica,*** 1903. *Cardita* CARDITIDAE

1903. AMNBA, 9:215, fig. 12.
1907*a*. AMNBA, 14:24, 47. *Venericardia* (Rocanéen et Patagonéen).

*Type Locality.*—Río Chico, Chubut.
*Holotype.*—#360, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Ihering (1904) referred to another specimen, a cast from Roca, which is not listed in the 1914 catalogue and was not found in the collection. The species has affinities with *Venericardia inequalis* Philippi, also from the Patagonian Formation. It is similar to "*Cardita*" *iheringi* Böhm, 1903:72 (= *Cardita burckhardti* Ihering; see Burckhardt, 1902:216, fig. 1–7).

***pampa,*** 1914. *Bulimulus sporadicus* ORTHALICIDAE: BULIMULINAE

1914. NPRMP, 1(3):70–71. Not figured.
1944. Parodiz, CZMHN, 1(17):1–2, fig. 2–3. *Peronaeus* (*Lissoacme*) *ameghinoi* (Ihering).

= *Peronaeus* (*Lissoacme*) *ameghinoi* (Ihering). See *Bulimulus ameghinoi* Ihering.
*Type Locality.*—"Buenos Aires."
*Syntypes.*—#562, coll. Ameghino, 1910.
*Stratigraphy.*—Buenos Aires Formation (Pleistocene).
*Remarks.*—The type locality of *P.* (*L.*) *ameghinoi* is Chapadmalal, Buenos Aires Province; the specimens of *B. pampa* are probably from Luján where Ameghino made extensive collections. The species *ameghinoi* occurs in the region of San Matias Gulf as the subspecies *P.* (*L.*) *ameghinoi madrynensis* Parodiz, 1944.

***pampa,*** 1914. *Siphonaria lessoni* SIPHONARIIDAE

1914. NPRMP, 1(3):69. Not figured (Pampeano Inferior).

= *Siphonaria lessoni* (Blainville, 1826).
*Type Locality.*—"Buenos Aires" probably near or at Chapadmalal.
*Syntypes.*—#556, two specimens, coll. Ameghino, 1910.
*Stratigraphy.*—Belgrano Formation (Lower Pleistocene); Recent.

***pampeana,*** 1907. *Bullia gradata* NASSARIIDAE

1907*a*. AMNBA, 14:445. Not figured.
1914. NPRMP, 1(3):105 (Pampeano).
1933. Feruglio, ARMGB, 8 bis:236, 239.
1939. Parodiz, Physis, 17:754, fig. 3–4. *Buccinanops.*

= *Buccinanops gradatum* (Deshayes, 1844).
*Type Locality.*—Puerto Militar, Prov. Buenos Aires.
*Syntypes.*—#855, 19 specimens, coll. Ameghino, 1910.
*Stratigraphy.*—Belgrano Formation (Lower Pleistocene); also Recent and common from Uruguay to northern Patagonia.

***pampeana,*** 1907. *Chione* VENERIDAE

1907*a*. AMNBA, 14:454, pl. 18, fig. 125a–b.
1914. NPRMP, 1(3):56.

*Type Locality.*—San Julian, Santa Cruz.
*Syntypes.*—#468, 18 valves, coll. Ameghino, 1900.
*Stratigraphy.*—Deseado beds coeval with the Belgrano Formation (Pleistocene).
*Remarks.*—This is most likely a synonym of *Protothaca antiqua* (King), the specimens in the type lot being slightly more elongated.

**panensis,** 1914. *Arca* ?ARCIDAE

1914. NPRMP, 1(3):16–17, pl. 2, fig. 1 (Formação Patagonica).

*Type Locality.*—Pan de Azucar, Santa Cruz.
*Holotype.*—#109, a cast, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—The unique specimen is an incomplete cast of questionable specific determination, but not likely an *Arca.*

**panis,** 1907. *Panopaea* [sic] HIATELLIDAE

1907*a*. AMNBA, 14:327, pl. 13, fig. 87.
1914. NPRMP, 1(3):64, pl. 2, fig. 9a–b (Patagonico Inferior).

= *Panopea panis* Ihering.
*Type Locality.*—Pan de Azucar, Santa Cruz.
*Holotype.*—#518, corresponding to the specimen figured in Ihering (1914), coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Ihering (1914:64) wrote that the species was not figured until 1914, but he did figure a specimen in 1907 without mentioning it in the text. The two figures (1907*a* and 1914) appear slightly different, but the former is a photograph and the latter is a drawing. The original description is based on "l'unique exemplaire" interpreted here as the specimen figured in the 1914 catalogue. *Panope* and *Panopaea* of authors are misspellings of *Panopea.*

**patagonensis,** 1907. *Pododesmus* ANOMIIDAE

1907*a*. AMNBA, 14:266, pl. 9, fig. 63a–b.
1914. NPRMP, 1(3):27 (Patagonico Inferior).

*Type Locality.*—Pan de Azucar, Santa Cruz.
*Syntypes.*—#213, six valves.
*Other Lots.*—#214, Pan de Azucar, Santa Cruz, four valves, coll. Ameghino, 1900; #215, Río Chico, Chubut, one valve, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**patagonensis,** 1897. *Potamides* POTAMIDIDAE

1897*b*. RMP, 2:315, text fig. 20 (first of two figures numbered 20; the other figure numbered 20 on page 316 is *Ostrea pyrotheriorum.*)
1899*b*. ASCA, 47:67. *Melania* sp.
1907*a*. AMNBA, 14:52.
1914. NPRMP, 1(3):92 (Salamanqueano).
1969. Parodiz, ACM, 40:152.

*Type Locality.*—"Lehuen-ark" error for Sehuen Aik (e), Valley of Sehuen River.
*Lectotype.*—#749, the specimen figured by Ihering (1897*b*:text fig. 20) is here designated the lectotype. The type lot consisted of nine syntypes.
*Stratigraphy.*—Sehuenan Formation (Paleocene). The name *P. patagonensis* was mentioned frequently in geological literature by Ameghino, Windhausen, Frenguelli, Feruglio, and others, and some of the references may correspond to *Potamides chaliana* Parodiz, 1969.

**patagonensis,** 1903. *Rostellaria* STROMBIDAE

1903. AMNBA, 9:209. Not figured.
1904. RMLP, 11:239, pl. 2, fig. 11.
1907*a*. AMNBA, 14:29. *Aporrhais* (Rocanéen).
1914. NPRMP, 1(3):94 (Salamanqueano).

= *Tibia patagonensis* (Ihering).

*Type Locality.*—Roca, Río Negro.

*Syntypes.*—#759, two casts, specimens collected by C. Ameghino and S. Roth in the same lot.

*Stratigraphy.*—Roca Formation (Paleocene).

*Remarks.*—*Aporrhais rocai* Böhm, 1903:72, is synonymous but unavailable (*nomen nudum*). Both *Rostellaria patagonensis* and *R. rocai* were from the same locality and strata, and known only by internal casts; the variations in both species show similarities. *Rostellaria* Lamarck, 1799 (= *Tibia* Röding, 1798).

**patagonica,** 1907. *Abra* SEMELIDAE

1907*a*. AMNBA, 14:316, pl. 2, fig. 82a–b.
1914. NPRMP, 1(3):59 (Patagonico Inferior).

= ?*Abra uruguayensis* (Pilsbry, 1879). Recent.

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#489, 25 valves, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**patagonica,** 1897. *Arca* ARCIDAE

1897*b*. RMP, 2:235, pl. 4, fig. 25, and pl. 5, fig. 30.
1902. Ortmann, p. 93, pl. 25, fig. 3a–b.
1907*a*. AMNBA, 14:236. *Arca umbonata* Lamarck.
1914. NPRMP, 1(3):18 (Superpatagonico).

= *Arca umbonata* Lamarck.

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Type.*—The type lot containing four valves reported by Ihering (1914) is not in the collection.

*Other Lots.*—#118, Cabo Tres Puntas, coll. Ameghino, 1900; #119, Cañada de los Artilleros, 25 valves, coll. Ameghino, 1900; #120, San Julian, one specimen, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**patagonica,** 1897. *Bulla* ?RETUSIDAE

1897*b*. RMP, 2:271, text fig. 8 (Formação Santacruzense).
1902. Ortmann, p. 246, pl. 37, fig. 8a, c.
1907*a*. AMNBA, 14:121.
1914. NPRMP, 1(3):69 (Superpatagonico).

= ?*Retusa patagonica* (Ihering), **new combination.**

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Syntypes.*—#551, 25 specimens, coll. Ameghino.

*Other Lot.*—#552, Cañada de los Artilleros, 12 specimens, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**patagonica,** 1907. *Lahillia angulata* CARDIIDAE

1897*b*. RMP, 2:257, text fig. 2 on p. 258. *Amathusia angulata* Philippi.
1907*a*. AMNBA, 14:294. *Lahillia angulata patagonica* Ihering.
1914. NPRMP, 1(3):50 (Patagonico Inferior–Super).

= *Lahillia angulata* (Philippi, 1887).
*Type Locality.*—Sierra de los Baguales, Santa Cruz.
*Holotype.*—#413, cast with portion of the shell, coll. Hauthal (by monotypy).
*Other Lots.*—#412, Santa Cruz, one cast, coll. J. Bicego, 1897; #414, Yegua Quemada, one valve, large, 21 cm, but broken.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—In the collection there is also a cast in plaster of Paris, #4462, from the specimen (?type) of *Amathusia angulata* sent to Ihering by Philippi from Navidad, Chile. Cossmann (1899*c*:134) listed the species as *Iheringia angulata* (Philippi).

**patagonica,** 1907. *Lima* LIMIDAE

1907*a*. AMNBA, 14:262, pl. 9, fig. 60.
1914. NPRMP, 1(3):29 (Patagonico Medio–Inferior).

*Type Locality.*—Punta Nueva, Santa Cruz.
*Syntypes.*—#230, nine valves, coll. Ameghino, 1900; #231, Golfo San Jorge, one valve, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**patagonica,** 1897. *Tellina* TELLINIDAE

1897*b*. RMP, 2:261, pl. 5, fig. 261 (Formação Santacruzense).
1907*a*. AMNBA, 14:315.
1914. NPRMP, 1(3):59 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.
*Syntypes.*—#486, three valves, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—See *Tellina patagonica camaronesia* Ihering.

**patagonica,** 1897. *Voluta* MARGINELLIDAE

1897*b*. RMP, 2:306, pl. 3, fig. 6 (Formação Santacruzense).
1907*a*. AMNBA, 14:200. *Neoimbricaria.*
1914. NPRMP, 1(3):107.

= *Neoimbricaria patagonica* (Ihering), as figured in Wenz, 1938:1297, fig. 3701.
*Type Locality.*—Yegua Quemada, Santa Cruz.
*Syntypes.*—#868, five specimens, coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**patagonica,** 1907. *Vulpecula* COSTELLARIIDAE [VEXILLIDAE]

1907*a*. AMNBA, 14:199, pl. 7, fig. 48a–b.
1914. NPRMP, 1(3):107 (Patagonico Medio).

= *Vexillum patagonicus* (Ihering).
*Type Locality.*—Golfo San Jorge, Santa Cruz.
*Holotype.*—#865, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—*Vulpecula* Blainville, 1824 (= *Vexillum* Röding, 1798).

**patagonicum,** 1907. *Cardium* CARDIIDAE

1907*a*. AMNBA, 14:293, pl. 11, fig. 73.
1914. NPRMP, 1(3):48 (Patagonico).

*Type Locality.*—Santa Cruz.
*Holotype.*—#396, coll. J. Bicego, 1897 (by monotypy).
*Other Lot.*—#397, Cabo Tres Puntas, three valves, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**patagonicus,** 1907. *Actaeon* ACTAEONIDAE

1907*a*. AMNBA, 14:117, pl. 4, fig. 1.
1914. NPRMP, 1(3):68 (Superpatagonico).

*Type Locality.*—Cañada de los Artilleros, Santa Cruz.
*Syntypes.*—#546, two specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—A very distinct, more elongated species than *Actaeon argentinus* Ihering from the same locality and strata, and perhaps not congeneric.

**patagonicus,** 1907. *Crassatellites* CRASSATELLIDAE

1907*a*. AMNBA, 14:279.
1914. NPRMP, 1(3):40 (Patagonico Inferior).

= *Crassatella kokeni* Ihering.
*Type Locality.*—Camarones, Chubut.
*Syntypes.*—#332, two valves, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Ihering named *C. patagonicus* as being different only in size from *C. kokeni* as figured by Ortmann (1902:123, pl. 38, fig. 10). He gave neither description nor illustrations of *C. patagonicus. Crassatellites* Krueger, 1823 (= *Crassatella* Lamarck, 1799).

**patagonicus,** 1904. *Helcioniscus luciferus* PATELLIDAE: NACELLINAE

1904. RMLP, 11:285. Not figured.
1907*a*. AMNBA, 14:436.
1914. NPRMP, 1(3):436 (Formação Pampeana).

= *Cellana lucifera* (Ihering).
*Type Locality.*—Deseado, Santa Cruz.
*Syntypes.*—#564, two specimens, coll. Ameghino, 1900.
*Stratigraphy.*—"Deseadense," Pleistocene marine of Deseade (= Belgrano Formation).
*Remarks.*—See *Helcioniscus luciferus* Ihering.

**paucicostata,** 1907. *Scalaria rugulosa* "var." EPITONIIDAE

1907*a*. AMNBA, 14:140. Not figured.
1914. NPRMP, 1(3):81 (Patagonico Inferior).

= *Opalia* (*Nodoscala*) *rugulosa* (Sowerby, 1846).
*Type Locality.*—Manantial Salado, Santa Cruz.
*Holotype.*—#631, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—"*Scalaria*" *rugulosa* Sowerby, 1846, is a species of wide distribution from New Zealand to Chile and is also abundant in the Tertiary of Patagonia in Chubut and Santa Cruz.

***pauciradiata,*** 1899. *Cardium philippii* CARDIIDAE

1899*a*. NJMGP, 2:15.
1907*a*. AMNBA, 14:104, 291. *Cardium philippii pauciradiatum.*
1914. NPRMP, 1(3):48 (Patagonico).

= *Cardium philippii* Ihering.

*Type Locality.*—Santa Cruz.

*Syntypes.*—#402, three valves, coll. Bicego, 1897.

*Stratigraphy.*—In Ihering's table (1907*a*:104) the provenance of *pauciradiata* is uncertainly indicated. Probably Patagonian Formation (Lower Miocene).

*Remarks.*—There is one additional specimen in the Ihering Collection, #2481, from Río Foyel, collector unknown.

***paucispina,*** 1897. *Pholas* PHOLADIDAE

1897*b*. RMP, 2:265, text fig. 5 (Formação Santacruzense).
1907*a*. AMNBA, 14:329. *Barnea paucispina* (Ihering).
1914. NPRMP, 1(3):65 (Superpatagonico).

= ?*Netastoma paucispina* (Ihering), **new combination.**

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Syntype.*—#521, only one of the three valves mentioned by Ihering (1914); coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The specimen figured in Ihering (1897*b*) is a restoration. *Nettastomella* Carpenter, 1865, is an unnecessary replacement name for *Netastoma* Carpenter, 1864.

***paucisquamatus,*** 1907. *Pododesmus* ANOMIIDAE

1907*a*. AMNBA, 14:268, pl. 10, fig. 10a–b.
1914. NPRMP, 1(3):27 (Patagonico Inferior).

*Type Locality.*—Southeast of Punta Nueva, Santa Cruz.

*Holotype.*—#220, coll. Ameghino, 1900 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***pazensis,*** 1914. *Pododesmus* ?ANOMIIDAE

1914. NPRMP, 1(3):28, pl. 2, fig. 2 (Formação Entreriana).

*Type Locality.*—La Paz, Entre Rios.

*Holotype.*—#223, coll. S. Roth (by monotypy).

*Stratigraphy.*—Paraná Formation (Upper Miocene).

*Remarks.*—Ihering (1914:28) states, ". . . esta descripção ha de ser considerada como provisoria." The generic position of this species is uncertain, but it is not a species of *Pododesmus.*

***percrassa,*** 1897. *Ostrea* OSTREIDAE

1897*b*. RMP, 2:221, text fig. 1 (and pl. 9, fig. 53 as *Ostrea patagonica* of authors; the true *O. patagonica* d'Orbigny in the plate is fig. 52).

1902. Hauthal, RMLP, 10:46. *Ostrea hatcheri* Ortmann.
1902. Ortmann, p. 99. *Ostrea ingens* in part.
1907*a*. AMNBA, 14:18. *Ostrea hatcheri* Ortmann.
1914. NPRMP, 1(3):23. *Ostrea hatcheri* (Patagonico Superior).

= *Ostrea hatcheri* Ortmann, 1897.

*Type Locality*.—Santa Cruz.

*Syntypes*.—#173, five of the six valves in original type lot are present in the collection.

*Other Lots*.—The name is preoccupied by *Ostrea percrassa* Conrad, 1840, a Miocene species from North America. There are other lots in the collection under *Ostrea hatcheri*, #174–183, from different localities including Puerto Madryn, Camarones, Pan de Azucar, north of Río Seco, Río Chico of Chubut, Punta Nodales, southeast of Punta Nueva, and Deseado, collected by S. Roth, J. Bicego, and C. Ameghino. There are a total of 90 specimens in these lots.

*Stratigraphy*.—Patagonian Formation (Lower Miocene).

**perplana,** 1897. *Tellina* PSAMMOBIIDAE

1897*b*. RMP, 2:259, pl. 6, fig. 39 (Formação Santacruzense).
1907*a*. AMNBA, 14:313. *Sanguinolaria*.
1914. NPRMP, 1(3):58 (Superpatagonico).

= ?*Psammotella perplana* (Ihering).

*Type Locality*.—La Cueva, Santa Cruz.

*Syntype*.—#481, only one specimen remaining of the three listed by Ihering (1914), coll. Ameghino, 1900.

*Stratigraphy*.—Patagonian Formation (Lower Miocene).

***Phacoides*** sp. LUCINIDAE: MILTHINAE

1914. NPRMP, 1(3):46.

= *Miltha iheringiana* Doello-Jurado (1919:558).

*Locality*.—La Paz, Entre Rios.

*Specimens*.—One specimen from Puerto Madryn, Chubut, coll. J. Bicego, 1897; there are three other casts in the collection, #388 from La Paz, Entre Rio, coll. S. Roth.

*Stratigraphy*.—The species is known from both Paraná Formation of Entre Rios and Río Negro Formation of Chubut (Upper Miocene).

**philippii,** 1897. *Cardium* CARDIIDAE

1897*b*. RMP, 2:249, pl. 6, fig. 40 (Formação Santacruzense).
1907*a*. AMNBA, 14:291.
1914. NPRMP, 1(3):48 (Superpatagonico).

*Type Locality*.—Yegua Quemada, Santa Cruz.

*Holotype*.—#398, one valve, C. Ameghino (by monotypy).

*Other Lots*.—#399, Yegua Quemada, Santa Cruz, six valves, coll. Ameghino; #400, Santa Cruz, three casts, coll. J. Bicego, 1897; #401, Cañada de los Artilleros, one valve, coll. Ameghino, 1900.

*Stratigraphy*.—Patagonian Formation (Lower Miocene).

*Remarks*.—This is *Cardium multiradiatum* (in part) in Philippi (1887:171, pl. 38, fig. 9), not *Cardium multiradiatum* Sowerby, 1833. See also *Cardium huttoni* Ihering.

***philippii,*** 1907. *Gibbula* ?RAPHISTOMATIDAE

1907*a*. AMNBA, 14:132, pl. 4, fig. 6a–c.
1914. NPRMP, 1(3):74 (Patagonico Medio).

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.
*Syntypes.*—#585, four specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This species belongs to the Pleurotomariacea, and to a genus similar to *Trophidostropha* Longstoff from the European Carboniferous, but probably undescribed. E. Feruglio collected it at Epuyen.

***piconus,*** 1907. *Pecten* PECTINIDAE

1907*a*. AMNBA, 14:46, text fig. 4.
1914. NPRMP, 1(3):36 (Salamanqueano).

*Type Locality.*—Pico Salamanca, Santa Cruz.
*Holotype.*—#292, single valve, coll. Ameghino, 1909 (by monotypy).
*Stratigraphy.*—Salamanca Formation (Paleocene).
*Remarks.*—This species may belong in *Pecten sensu lato*; its taxonomic position is questionable.

***pilsbryi,*** 1899. *Voluta* VOLUTIDAE

1899*a*. NJMGP, 2:34, pl. 12, fig. 9.
1902. Ortmann, pl. 37, fig. 1a–b.
1907*a*. AMNBA, 14:210. *Cymbiola.*
1914. NPRMP, 1(3):109 (Superpatagonico).

= *Adelomelon* (*Pachycymbiola*) *pilsbryi* (Ihering).
*Type Locality.*—Santa Cruz.
*Syntypes.*—#883, one specimen plus two casts, coll. J. Bicego, 1897.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***pisum,*** 1907. *Lima* LIMIDAE

1907*a*. AMNBA, 14:263, pl. 9, fig. 61a–c. *Limatula.*

*Type Locality.*—Southeast of Punta Nueva, Santa Cruz.
*Syntypes.*—#228, 16 valves, coll. Ameghino, 1900; #229, Punta Casamayor, 12 valves, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***plata,*** 1907. *Cardita* CARDITIDAE

1907*a*. AMNBA, 14:451, pl. 18, fig. 23a–b.

= *Carditamera plata* (Ihering).
*Type Locality.*—Monte Hermoso, Prov. de Buenos Aires.
*Type.*—Not in the collection.
*Stratigraphy.*—Belgrano Formation (Lower Pleistocene) and Querandinan (Upper Pleistocene); Recent.

***plicifera,*** 1897. *Marginella* MARGINELLIDAE

1897*b*. RMP, 2:308, text fig. 19.
1902. Ortmann, p. 225, fig. 2 (with supplementary description).

1907*a*. AMNBA, 14:200. *Neoimbricaria*.
1914. NPRMP, 1(3):107. *Neoimbricaria* (Superpatagonico).

= ?*Neoimbricaria plicifera* (Ihering).
*Type Locality.*—Yegua Quemada, Santa Cruz.
*Holotype.*—#869, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**portenia,** 1907. *Myochlamys patagonensis* PECTINIDAE

1907*a*. AMNBA, 14:377. Not figured.

= *Chlamys patagonensis portenia* (Ihering).
*Type Locality.*—Puente Alsina, Buenos Aires, from a perforation 80 m deep.
*Type.*—Not in the collection.
*Stratigraphy.*—Paraná Formation (Upper Miocene).

*Remarks.*—In the original description Ihering stated that he received several specimens from Ameghino.

**praenuncius,** 1897. *Pecten* PECTINIDAE

1897*b*. RMP, 2:230. Not figured.
1902. Ameghino, ASCA, 54:224. *Chlamys espejoana* Ihering, *in litteris*.
1907*a*. AMNBA, 14:251, pl. 7, fig. 54. *Myochlamys*.
1914. NPRMP, 1(3):33 (Patagonico Inferior–Superpatagonico).

= *Chlamys praenuncius* (Ihering).
*Type Locality.*—Punta Nova (Nueva), Santa Cruz.
*Syntypes.*—#268, a complete specimen, eight valves.

*Other Lots.*—#269, Monte Espejo, four valves, coll. Ameghino; #270, Yegua Quemada, Santa Cruz, two valves, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**princeps,** 1907. *Neomphalius* TROCHIDAE

1907*a*. AMNBA, 14:135, pl. 4, fig. 8a–b.
1914. NPRMP, 1(3):76 (Patagonico Medio).

= *Tegula patagonica* (d'Orbigny, 1840).
*Type Locality.*—Punta Casamayor, Santa Cruz.
*Holotype.*—#594, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Ihering did not compare this species with *T. patagonica* which is known from the Araucanean Formation (Pliocene), and from Rio de Janeiro to northern Patagonia (Recent).

**prisca,** 1907. *Modiolarca* ?GAIMARDIIDAE

1907*a*. AMNBA, 14:276, pl. 14, fig. 94.
1914. NPRMP, 1(3):39 (Patagonico Medio).

= ?*Gaimardia prisca* (Ihering).
*Type Locality.*—Southeast of Punta Nueva, Santa Cruz.
*Holotype.*—#322, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The holotype is a very poor specimen for correct generic identification.

**prisca,** 1907. *Olivancillaria* OLIVIDAE

1907*a*. AMNBA, 14:370, text fig. 15.
1914. NPRMP, 1(3):108 (Formação Entreriana).

*Type Locality.*—Paraná, Entre Rios.

*Holotype.*—#873, one cast, coll. S. Roth (by monotypy).

*Stratigraphy.*—Paraná Formation (Upper Miocene).

*Remarks.*—This is *Oliva reticularis brasiliana* in Borchert (1901:47, pl. 4, fig. 8), not *O. reticularis* Lamarck, 1811, or *O. brasiliana* Lamarck, 1811. Similar to the Recent species *Olivancillaria elongata* (Fischer, 1807) from Brazil and Uruguay.

**prisca,** 1907. *Struthiolaria* STRUTHIOLARIIDAE

1907*a*. AMNBA, 14:28, pl. 3, fig. 18 (Crétacée Supérieur).

*Type Locality.*—Roca, Río Negro.

*Type.*—Not in the collection under this name.

*Stratigraphy.*—Roca Formation (Paleocene).

*Remarks.*—The type material was stated to consist of "un moule externe mal conserve." One specimen in the collection, #782 from Park-Aik, is not well preserved and was listed by Ihering (1914:96); it may be this species. See *Struthiolaria ornata* "var." *densestriata.*

**Proscaphella,** 1907. VOLUTIDAE

1907*a*. AMNBA, 14:205. New genus.

*Type Species.*—*Voluta gracilior* Ihering (= *V. gracilis* Philippi, 1887).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—= *Miomelon* Dall, 1907 (type species: *Volutilithes philippianus* Dall; = *V. gracilis* Philippi, 1887).

**pruniformis,** 1907. *Marginella* MARGINELLIDAE

1907*a*. AMNBA, 14:370. New name for *Marginella* aff. *prunum* in Borchert (1901:48, pl. 6, fig. 11), not *Marginella prunum* Swainson, 1822.

*Type Locality.*—Paraná, Entre Rios (Borchert).

*Stratigraphy.*—Paraná Formation (Upper Miocene).

**pseudopatagonica,** 1899. *Cardita* CARDITIDAE

1899*a*. NJMGP, 2:16.
1907*a*. AMNBA, 14:283. *Venericardia patagonica* (Sowerby).
1914. NPRMP, 1(3):44. *Venericardia pseudopatagonica* (Superpatagonico).

= *Venericardia patagonica* (Sowerby).

*Type Locality.*—La Cueva, Santa Cruz (in Ihering [1914] changed to Yegua Quemada).

*Syntypes.*—#365, two specimens, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species was based on juveniles of *V. patagonica.*

**pseudopatagonica,** 1907. *Corbula* CORBULIDAE

1907*a*. AMNBA, 14:388. Not figured; new name for *Corbula patagonica* in Borchert (1901:44, pl. 4, fig. 31–32), not *Corbula patagonica* d'Orbigny, 1846.

*Type Locality.*—Paraná, Entre Rios (Borchert).
*Stratigraphy.*—Paraná Formation (Upper Miocene).

***Pseudotylostoma,*** 1903. NATICIDAE

1903. AMNBA, 9:207. New genus.

*Type Species.*—*Pseudotylostoma romeroi* Ihering.
*Stratigraphy.*—Roca Formation (Paleocene).
*Remarks.*—See *Pseudotylostoma romeroi.*

***pueyrredona,*** 1907. *Calyptraea* CREPIDULIDAE

1907*a*. AMNBA, 14:149. New name for *Trochita araucana* in Philippi (1887:87, pl. 11, fig. 1), not *Trochita araucana* Lesson, 1831.
1914. NPRMP, 1(3):84 (Patagonico).

*Type Locality.*—Northwest Santa Cruz at Lake Pueyrredón.
*Syntypes.*—#666, two specimens, coll. Hatcher, received from Ortmann.
*Stratigraphy.*—Patagonian and Navidad formations (Feruglio, 1949–1950) (Lower Miocene).
*Remarks.*—This species was misidentified as *Galerus araucanus* by Ortmann (1902:181, pl. 32, fig. 7a–b). *Trochita araucana* Lesson is a synonym of *Calyptraea radians* Lamarck. In the same publication (1907*a*:253) Ihering gave another new name, *Calyptraea levuana,* for the species misidentified as *Trochita araucana* by Philippi (1887).

***pueyrredona,*** 1907. *Leda* NUCULANIDAE

1907*a*. AMNBA, 14:229. New name for *Leda errazurizi* in Ortmann (1902:84, pl. 26, fig. 3a–b), not *Nucula errazurizi* Philippi (1887:189, pl. 41, fig. 11).
1914. NPRMP, 1(3):14 (Formação Patagonica).

= *Nuculana pueyrredona* (Ihering).
*Type Locality.*—Lago Pueyrredón, Santa Cruz (Ortmann).
*Syntypes.*—#83, two valves received from Ortmann and reported as "cotypos" are in collection.
*Stratigraphy.*—Patagonian and Navidad formations (Lower Miocene).

***pueyrredona,*** 1907. *Venericardia* CARDITIDAE

1907*a*. AMNBA, 14:286. New name for *Cardita volckmanni* in Ortmann (1902:126, pl. 26, fig. 6), not *Cardita volckmanni* Philippi, 1887 ("Terciario antiguo").
1914. NPRMP, 1(3):45. *Venericardia volckmanni* (Philippi).

= *Venericardia volckmanni* (Philippi).
*Type Locality.*—Lago Pueyrredón, Santa Cruz, as Ihering referred to specimens listed in Ortmann (1902). The type locality for *Cardita volckmanni* Philippi is Tubul, Chile.
*Stratigraphy.*—?Navidad Formation (?Miocene).
*Remarks.*—One valve received from Philippi (Lot #372) is in the Ihering Collection under *volckmanni,* not under *pueyrredona.*

***puntana,*** 1907. *Pecten patagonensis* PECTINIDAE

1897*b*. RMP, 2:226. *Pecten patagonensis* d'Orbigny.
1907*a*. AMNBA, 14:257. *Myochlamys patagonensis puntana.*

1914. NPRMP, 1(3):32 (Formação Entreriana Patagonico).

= *Chlamys patagonensis* (d'Orbigny, 1842).
*Type Locality.*—Golfo San Jorge, Punta Nova (Nueva), Santa Cruz.
*Syntypes.*—#267, 12 valves, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Curated in the Ihering Collection under *Myochlamys patagonensis puntana.*

**puntarenasensis,** 1907. *Polynices* NATICIDAE

1907*a*. AMNBA, 14:341. New name for *Natica chiloensis* in Ortmann (1899:431) and Ortmann (1902, pl. 186, fig. 1a–b), not *Natica chiloensis* Philippi, 1887.
1914. NPRMP, 1(3):85 (Magellanico Inferior).

*Type Locality.*—Punta Arenas, Chile (Ortmann).
*Syntypes.*—#678, three specimens received from Ortmann and reported as "co-types" are in the collection.
*Stratigraphy.*—Magellanian Formation (Lower Oligocene).

**puntasium,** 1907. *Calliostoma* TROCHIDAE

1907*a*. AMNBA, 14:136, pl. 4, fig. 10a–c.
1914. NPRMP, 1(3):79 (Patagonico Medio).

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.
*Types.*—Not in the collection.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Ihering compared *C. puntasium* to *Calliostoma rioense* Dall (= *C. jucundum* [Gould]), but considering the nature of the columella in the illustration it appears to belong in the subgenus *Kombologion* Clench and Turner, 1960. Two specimens were listed in the 1914 catalogue.

**pyramidesia,** 1907. *Turritella ambulacrum* TURRITELLIDAE

1907*a*. AMNBA, 14:367. Not figured.
1914. NPRMP, 1(3):88 (Formação Entreriana).

= *Turritella ambulacrum* Sowerby, 1846.
*Type Locality.*—Puerto Piramides, Chubut.
*Holotype.*—#710, coll. Ameghino, 1903 (by monotypy).
*Other Lot.*—#711, Trelew, Chubut, three specimens, coll. S. Roth.
*Stratigraphy.*—Río Negro Formation (Upper Miocene) and also Camacho Formation in Uruguay which is coeval with the Paraná and Río Negro formations.
*Remarks.*—Although this material is both allopatric and allochronic with nominotypical *T. ambulacrum,* it is not different and the name is placed in synonymy. *Turritella ambulacrum* Sowerby of southern range in Santa Cruz is represented in the collection by ten lots from different localities. See also *T. steinmanni* Ihering, *T. argentina* Ihering, and *T. ambulacrum sylva* Ihering.

**pyramidesium,** 1907. *Pecten oblongus* PECTINIDAE

1907*a*. AMNBA, 14:375. Not figured.
1914. NPRMP, 1(3):36. *Pecten oblongus* Bravard (Formação Entreriana).

= *Chlamys oblongus pyramidesium* (Ihering).
*Type Locality.*—Puerto Piramides, Chubut.

*Types.*—Not in the collection.
*Other Lot.*—#291, *Pecten oblongus* Bravard, three specimens, coll. S. Roth, 1903.
*Stratigraphy.*—Paraná and Río Negro formations (Upper Miocene).
*Remarks.*—Ihering (1907) reports specimens from this locality collected by Ameghino in 1903, but none are in the collection under this name; only "*Pecten*" *oblongus* from Entre Rios.

***pyriformis,*** 1897. *Trophon* MURICIDAE

1897*b*. RMP, 2:295, pl. 3, fig. 5 (Formação Santacruzense).
1907*a*. AMNBA, 14:183, pl. 5, fig. 31.
1914. NPRMP, 1(3):101 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.
*Syntypes.*—#828, one specimen and one fragment (juveniles), coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—These may belong in *Trophon lamellosus* (Gmelin).

***pyrotheriana,*** 1907. *Polynices* NATICIDAE

1907*a*. AMNBA, 14:154, pl. 5, fig. 17.
1914. NPRMP, 1(3):85, pl. 3, fig. 13 (Patagonico Inferior).

= *Lunatia pyrotheriana* (Ihering), **new combination.**
*Type Locality.*—Camarones, Chubut.
*Syntypes.*—#679, six large specimens and nine smaller, coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene), also known from the Magellanian Formation (Lower Oligocene) of Río Turbio.

***pyrotheriorum,*** 1897. *Ostrea* GRYPHAEIDAE

1897*b*. RMP, 2:315, text fig. 20 on p. 316 [there are two figures numbered 20, the first on page 315 is *Potamides patagonensis*].
1902*a*. AMNBA, 4:116. *Gryphaea* (Salamanqueano).
1903. Tournouër, BSGF, 3:473.
1907*a*. AMNBA, 14:44. *Gryphaea*.
1914. NPRMP, 1(3):21 (Cretáceo Superior "salamanquéen").

= *Gryphaea pyrotheriorum* (Ihering).
*Type Locality.*—Mamelones de Pinedo (also known as Tetas de Pinedo), Santa Cruz.
*Syntypes.*—#146, one complete specimen and one valve.
*Stratigraphy.*—Roca and Salamanca formations (Paleocene).
*Remarks.*—The species was also mentioned by Tournouër (1903) from Colhue Huapi, and by Feruglio (1949–1950) from Punta Peligros and Puerto Viser.

***quadrisulcata,*** 1897. *Perna* ISOGNOMONIDAE

1897*b*. RMP, 2:231, pl. 9, fig. 54 (Superior formationis patagonicae).
1902. Ortmann, p. 97, pl. 24, fig. 2a–b (Lake Pueyrredón).
1907*a*. AMNBA, 14:243.
1914. NPRMP, 1(3):20 (Superpatagonico).

*Type Locality.*—La Cueva, Santa Cruz.
*Holotype.*—#134, single valve, coll. Ameghino (by monotypy).
*Other Lot.*—#135, Cabo Tres Puntas, two valves.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Lot #135 was reported by Ihering (1914) as "typo" but it was collected by C. Ameghino in 1900, after the original description and from a different locality. This species is only tentatively placed in *Perna.*

**quemadensis,** 1907. *Fusus* FASCIOLARIIDAE: FUSININAE

1907*a*. AMNBA, 1907 14:195, pl. 6, fig. 39.
1914. NPRMP, 1(3):103 (Superpatagonico).

= ?*Fusinus quemadensis* (Ihering).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Holotype.*—#850, coll. Ameghino (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Fusus* of authors (= *Fusinus* Rafinesque, 1815); the canal in this species is very short. This species resembles *Fusinus pilsbryi* (Ortmann) which was originally described in the genus *Fusus* (Ortmann, 1900:375).

**quemadensis,** 1897. *Glycimeris* [sic] HIATELLIDAE

1897*b*. RMP, 2:264, text fig. 4 on p. 265 (Formação Santacruzense).
1907*a*. AMNBA, 14:328. *Panopaea* [sic].
1914. NPRMP, 1(3):63 (Superpatagonico).

= *Panopea quemadensis* (Ihering).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Holotype.*—#519, a restored valve, coll. Ameghino (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This is a species close to the Recent *Panopea abbreviata* Valenciennes, 1839.

**quemadensis,** 1897. *Marginella* MARGINELLIDAE

1897*b*. RMP, 2:307, pl. 3, fig. 9, and pl. 4, fig. 14.
1907*a*. AMNBA, 14:199, pl. 6, fig. 40a–b. *Neoimbricaria.*
1914. NPRMP, 1(3):107. *Neoimbricaria "guemadesia"* (Patagonico).

= *Neoimbricaria quemadensis* (Ihering).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Holotype.*—#870, coll. Ameghino (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**quemadensis,** 1897. *Pecten* PECTINIDAE

1897*b*. RMP, 2:228, pl. 6, fig. 38 (Formação Santacruzense).
1907*a*. AMNBA, 14:256. *Myochlamys.*
1914. NPRMP, 1(3):33 (Superpatagonico).

= *Chlamys* (*Zygochlamys*) *quemadensis* (Ihering).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Syntypes.*—#271, five valves, coll. Ameghino; #272, Las Cuevas, one specimen, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Lot #272 was reported as "typo" in Ihering (1914), but it was collected after the original description and from a different locality. See Morra (1985).

***quemadensis,*** 1897. *Terebra costellata* "var." TEREBRIDAE

1897*b*. RMP, 2:311 (Formação Santacruzense).
1902. Ortmann, p. 236, pl. 36, fig. 5. *Terebra costellata* Sowerby.
1907*a*. AMNBA, 14:216. *Terebra quemadensis.*
1914. NPRMP, 1(3):112 (Superpatagonico).

= *Terebra quemadensis* Ihering.
*Type Locality.*—Yegua Quemada, Santa Cruz.
*Holotype.*—#901, coll. Ameghino (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—The type locality of *Terebra costellata* Sowerby is Navidad, Chile; *T. quemadensis* is a different species. See *T. costellata santacruzensis* Ihering.

***quemadensis,*** 1896. *Voluta* VOLUTIDAE

1896. NDMG, 7:97.
1897*b*. RMP, 2:304, pl. 3, fig. 7 (Formação Santacruzense).
1899*a*. NJMGP, 2:34.
1907*a*. AMNBA, 14:207. *Proscaphella.*
1914. NPRMP, 1(3):111. *Cymbiola* (*Miomelon*) (Superpatagonico).

= *Miomelon quemadensis* (Ihering).
*Type Locality.*—Yegua Quemada, Santa Cruz.
*Holotype.*—#892, coll. Ameghino (by monotypy).
*Other Lot.*—#893, Manantial Salado, Santa Cruz, two incomplete specimens, reported as *Cymbiola* sp. aff. to *quemadensis,* coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—Ihering (1897*b*) stated that this species may be synonymous with *V. philippiana* Dall, which is a synonym of *Adelomelon gracilior* (Ihering, 1896).

***querandina,*** 1907. *Turbonilla* PYRAMIDELLIDAE: TURBONILLINAE

1907*a*. AMNBA, 14:442, pl. 17, fig. 121 (Pampeano Superior).

= *Turbonilla* (*Pyrgiscus*) *uruguayensis* Pilsbry, 1897.
*Type Locality.*—Bahía Blanca, formation pampienne supérieur.
*Type.*—Not in the collection.
*Stratigraphy.*—Querandí Formation (Late Pleistocene). Recent in Uruguay and Buenos Aires Province.

***rada,*** 1907. *Lotorium* (*Lampusia*) RANELLIDAE: CYMATIINAE

1907*a*. AMNBA, 14:175, pl. 5, fig. 29a–b (text states fig. 26 in error).
1914. NPRMP, 1(3):97 (Superpatagonico).

= *Semitriton rada* (Ihering), **new combination.**
*Type Locality.*—Rada Tilly, Santa Cruz.
*Syntypes.*—#793, three specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This species resembles *Semitriton dennanti* (Tale) from the Eocene of Australia but has a shorter spire and stronger nodulous cords.

***rada,*** 1914. *Marcia* VENERIDAE: SAMARANGIINAE

1914. NPRMP, 1(3):53, pl. 1, fig. 5a–b (Superpatagonico).

= ?*Samarangia exalbida* (Chemnitz, 1795).

*Type Locality.*—Rada Tilly, Santa Cruz.
*Holotype.*—#438, juvenile, coll. Ameghino (by monotypy).
*Other Lots.*—Unnumbered, Sierra de los Baguales, seven casts, coll. Hauthal.
*Stratigraphy.*—Patagonian Formation (Lower Miocene); Recent.

***radana,*** 1907. *Myochlamys geminata* "var." PECTINIDAE

1907*a*. AMNBA, 14:255. Not figured.
1914. NPRMP, 1(3):35 (Patagonico Inferior).

= *Chlamys geminata* (Sowerby, 1846).
*Type Locality.*—Rada Tilly, Santa Cruz.
*Syntype.*—#287, only one specimen reported as "cotypo" in the collection, C. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—There was another specimen mentioned in the description from Piedra Clavada but it was not in the collection. Although there are no specimens of *Chlamys geminata* Sowerby in the collection, Ihering (1907*a*) mentioned the species had been collected at several localities: Bajo de San Julian, Manantial Salado, Pan de Azucar, Monte Espejo, Punta Nodales, Punta Nueva, and Camarones. Feruglio (1949–1950) found the species *geminata* at all levels of the Patagonian, but listed the form *radana* with doubt.

***rionegrensis,*** 1903. *Modiola* MYTILIDAE

1903. AMNBA, 9:205. Not figured.
1904. RMLP, 11:233, pl. 1, fig. 5.
1907*a*. AMNBA, 14:38. *Modiolus.*
1914. NPRMP, 1(3):39 (Cretáceo Superior).

*Type Locality.*—Roca, Río Negro.
*Syntypes.*—#319, two specimens, coll. S. Roth.
*Stratigraphy.*—Roca Formation (Paleocene).
*Remarks.*—This is probably a *Brachidontes* Swainson.

***rionegrensis,*** 1903. *Ostrea* OSTREIDAE

1903. AMNBA, 9:202, pl. 1, fig. 5a–b (text shows 5–6).
1907*a*. AMNBA, 14:14, pl. 2, fig. 7; see also p. 46 (Rocanéen).
1914. NPRMP, 1(3):22 (Cretáceo Superior).

*Type Locality.*—Roca, Río Negro.
*Syntypes.*—#160, four valves, coll. S. Roth.
*Other Lots.*—#161, Roca, two valves, coll. Ameghino, 1904; #162, Homo Viejo [sic] for Horno Viejo near Roca, ten valves, coll. Ameghino, 1904.
*Stratigraphy.*—Roca Formation (Paleocene).
*Remarks.*—The specimen figured in Ihering (1907*a*) differs from the original of Ihering (1903). In the Danian of Cerro Dorotea, in the Magellanian region, the species is characteristic (Feruglio, 1949–1950).

***rioplatensis,*** 1907. *Columbella* COLUMBELLIDAE

1907*a*. AMNBA, 14:369. New name for *Columbella acuta* in Borchert (1901:50, pl. 5, fig. 3.), not *Anachis acuta* Stearns, 1873.

= ?*Anachis moleculina* (Duclos, 1840).

*Type Locality.*—Entre Rios (Borchert).
*Stratigraphy.*—?Paraná Formation (Upper Miocene).
*Remarks.*—On consultation with W. H. Dall, Ihering confirmed that *C. acuta* Stearns was a synonym of *C. albella* Dall and different from *C. rioplatensis*. The name *rioplatensis* given by Ihering might refer to deep perforations in the zone of La Plata River (?Puente Alsina) 230 ft deep.

***rocana,*** 1903. *Cucullaea* CUCULLAEIDAE

1903. AMNBA, 9:204, pl. 1, fig. 7.
1907. NPRMP, 14:35 (Rocanéen).

*Type Locality.*—Roca, Río Negro.
*Type.*—Not in the collection.
*Stratigraphy.*—Roca Formation (Paleocene).
*Remarks.*—In the work of 1914, no *Cucullaea* were listed from the Paleocene of Roca as indicated in the original description.

***rocana,*** 1903. *Gryphaea* GRYPHAEIDAE

1903. AMNBA, 9:198. Not figured.
1907*a*. AMNBA, 14:7, pl. 1, fig. 5a–b (Rocanéen), and p. 36.
1914. NPRMP, 1(3):20. *Gryphaea rothi* Böhm.

= ?*Odontogryphaea rothi* (Böhm, 1903).
*Type Locality.*—Roca, Río Negro.
*Stratigraphy.*—Roca Formation (Paleocene).
*Remarks.*—The description of *G. rothi* Böhm appeared a few weeks before *G. rocana* Ihering. *Gryphaea rocana* was based upon specimens figured by Burckhardt (1902:214, pl. 3, fig. 1–3) as *Gryphaea* aff. *pitcheri,* not *G. pitcheri* Morton, 1834.

***rocana,*** 1907. *Phacoides* LUCINIDAE

1907*a*. AMNBA, 14:25, pl. 3, fig. 5 (Rocanéen).
1914. NPRMP, 1(3):46.

= *Lucina* (*Lucinisca*) *rocana* (Ihering), **new combination.**
*Type Locality.*—Roca, Río Negro.
*Lectotype.*—#385, the only specimen in the collection of the three listed in the original description, coll. Ameghino, 1904, here designated the lectotype.
*Stratigraphy.*—Roca Formation (Paleocene).
*Remarks.*—*Phacoides* Blainville, 1825 (= *Lucina* Bruguière, 1797).

***rocana,*** 1903. *Ostrea* OSTREIDAE

1902. Burckhardt, p. 214, pl. 2, fig. 11–19. *Ostrea* aff. *bomilcaris* Coquand.
1903. AMNBA, 9:203. *Ostrea rocana.* Not figured.
1907*a*. AMNBA, 14:13. *O. ameghinoi rocana.*
1914. NPRMP, 1(3):23. *O. ameghinoi rocana* (Rocanéen).

*Type Locality.*—Roca, Río Negro.
*Holotype.*—#167, coll. Ameghino, 1901 (by monotypy).
*Other Lots.*—#168, Roca, eight valves, coll. S. Roth; #169, Neuquen, one well-preserved specimen; #170, Roca, one complete specimen, coll. Ameghino, 1904; #171, same five valves; #172, km 1216–1218, Río Negro, one valve.

*Stratigraphy.*—Roca Formation (Paleocene).

***rocanum,*** 1907. *Cardium* (*Hemicardium*) CARDIIDAE

1907*a.* AMNBA, 14:25, pl. 3, fig. 14a–b (Rocanéen).

= *Trachycardium rocanum* (Ihering), **new combination.**
*Type Locality.*—Roca, Río Negro.
*Type.*—Not in the collection; the figured specimen is an internal cast.
*Stratigraphy.*—Roca Formation (Paleocene).

***rochai,*** 1907. *Tylostoma* NATICIDAE

1907*a.* AMNBA, 14:40, text fig. 2 ("Cretaceous").

= *Ampullina* (*Pseudotylostoma*) *rochai* (Ihering).
*Type Locality.*—Rio Grande do Norte, Brasil.
*Type.*—Not in the collection; the single described specimen was collected by Francisco da Rocha.
*Stratigraphy.*—Probably Paleocene.

***romeroi,*** 1903. *Nautilus* NAUTILIDAE

1903. AMNBA, 9:191, pl. 1, fig. 1 (Crétacée Supérieur).
1907*a.* AMNBA, 14:41 (Rocanéen).
1914. NPRMP, 1(3):68 (Cretáceo Superior de Roca).

*Type Locality.*—Roca, Río Negro.
*Syntype.*—#543, labelled "cotypo," coll. Ameghino, 1901.
*Stratigraphy.*—Roca Formation (Paleocene).

***romeroi,*** 1903. *Pseudotylostoma* NATICIDAE

1903. AMNBA, 9:207, pl. 1, fig. 8.
1907*a.* AMNBA, 14:39.
1914. NPRMP, 1(3):87.

= *Ampullina* (*Pseudotylostoma*) *romeroi* (Ihering). See Wenz, 1938:1028.
*Type Locality.*—Roca, Río Negro.
*Syntype.*—#693, one cast labelled "cotypo," coll. Ameghino, 1904[!].
*Stratigraphy.*—Roca Formation (Paleocene).
*Remarks.*—Although the label for the syntype states the specimen was from C. Ameghino, 1904, the catalogue (Ihering, 1914) names Colonel A. Romero as the collector.

***rostrigera,*** 1902. *Gryphaea concors* "var." GRYPHAEIDAE

1902*a.* AMNBA, 4:113. Not figured.
1903. AMNBA, 9:211, pl. 2, fig. 10.
1907*a.* AMNBA, 14:43. *Gryphaea rostrigera* (Salamanqueano).
1945. Stenzel, BGSA, 56(12, pt. 2):1202. *Odontogryphaea.*

= *Odontogryphaea rostrigera* (Ihering).
*Type Locality.*—West of Río Chico, Chubut.
*Syntypes.*—#147, two complete specimens and six valves.
*Other Lots.*—#148, Puerto Malaspina, Chubut, one complete specimen and ten valves.

*Stratigraphy.*—Salamanca Formation (Paleocene).

*Remarks.*—This species is the type species of the genus *Odontogryphaea* Ihering.

**rothi,** 1904. *Diplodon* HYRIIDAE

1904. RMLP, 11:232, pl. 1, fig. 6.
1907*a*. AMNBA, 14:466.
1914. NPRMP, 1(3):37 ("Terciario antiguo").
1969. Parodiz, ACM, 40:69, pl. 7, fig. 4.

*Type Locality.*—Arroyo Lele, N. W. Chubut.

*Syntypes.*—#299, not in collection; the lectotype is deposited at CMNH (see *Remarks*).

*Stratigraphy.*—Colloncura beds (Simpson, 1933; Feruglio, 1949–1950), = Friasean Formation (Kraglievich, 1930). Upper Miocene.

*Remarks.*—The lectotype was designated by Parodiz (1969) from a specimen in Lot #299 in the Ihering Collection received in exchange from Dr. Max Birabén, at that time Director of the Museo Argentino de Ciencias Naturales. The species is also found at Arroyo Lepa given as "type," coll. Hauthal.

**rothi,** 1903. *Rostellaria* STROMBIDAE

1903. AMNBA, 9:204.
1904. RMLP, 11:12, pl. 2, fig. 9–10.
1907*a*. AMNBA, 14:28.
1914. NPRMP, 1(3):94 (Salamanqueano).

= *Tibia rothi* (Ihering).

*Type Locality.*—Roca, Río Negro.

*Syntypes.*—#760, nine casts, coll. S. Roth; #761, a "Variety," three casts, coll. Ameghino–S. Roth.

*Stratigraphy.*—Roca Formation (Paleocene).

*Remarks.*—See note under *Rostellaria patagonensis.* There are two lots in the collection under *Rostellaria* "sp." (undetermined species), #762 consisting of two casts from Valle Alsina, Chubut, coll. Ameghino, and #4233, a single cast from Roca, coll. S. Roth.

**salamanca,** 1903. *Chlamys* PECTINIDAE

1903. AMNBA, 9:214, pl. 1, fig. 11.
1907*a*. AMNBA, 14:47. *Myochlamys* (Salamanqueano).

*Type Locality.*—Pico Salamanca, Santa Cruz.

*Syntypes.*—#286, one complete specimen, seven valves, coll. Ameghino, 1900.

*Stratigraphy.*—Salamanca Formation (Paleocene).

*Remarks.*—This species appears to be ancestral to *Chlamys patagonicus* (d'Orbigny). Feruglio (1949–1950) reports it from the Valley of the Río Chico.

**salobris,** 1907. *Cyrena* CORBICULIDAE

1907*a*. AMNBA, 14:413, pl. 16, fig. 109 (Formação Araucana).
1914. NPRMP, 1(3):41.
1969. Parodiz, ACM, 40:95, fig. 14–15. *Neocorbicula.*

= *Cyanocyclas salobris* (Ihering), **new combination.**

*Type Locality.*—Sierra Laziar, Santa Cruz.

*Type Material.*—#336, lectotype and one paralectotype, coll. Ameghino; subsequent designation by Parodiz, 1969.

*Stratigraphy.*—Araucanean Formation (Lower Pliocene).

*Remarks.*—*Cyanocyclas* Blainville, 1818, and *Neocorbicula* Fischer, 1887, are subjective synonyms. This synonymy was not recognized correctly in Parodiz and Hennings (1965). I prefer to treat *Cyanocyclas* as a genus distinct from *Corbicula* because species of the former have a pallial sinus, longer siphons, and are restricted to the Neotropical region. Living species of *Cyanocyclas* are viviparous.

***santacruzense,*** 1914. *Cardium* CARDIIDAE

1914. NPRMP, 1(3):49, pl. 1, fig. 4a–b.

= *Laevicardium santacruzense* (Ihering), **new combination.**

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Holotype.*—#411, a broken valve, coll. Ameghino (by monotypy).

*Stratigraphy.*—Patagonia Formation (Lower Miocene).

***santacruzensis,*** 1907. *Chenopus* APORRHAIDAE

1907*a.* AMNBA, 14:170. New name for *Aporrhais araucana* in Ortmann (1902:200, pl. 33, fig. 9), not *Aporrhais araucana* Philippi, 1887, from the Tertiary of Chile.

= *Drepanocheilus santacruzensis* (Ihering), **new combination.**

*Type Locality.*—Santa Cruz (Ortmann).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species differs from *D. araucanus* (Philippi) by having axial instead of spiral sculpture.

***santacruzensis,*** 1907. *Pleurotoma* TURRIDAE

1907*a.* AMNBA, 14:219, pl. 7, fig. 46.
1914. NPRMP, 1(3):113 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Holotype.*—#907, incomplete specimen, coll. J. Bicego, 1897 (by monotypy).

*Other Lot.*—#908, Cañada de los Artilleros, one specimen, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***santacruzensis,*** 1897. *Polynices* NATICIDAE

1897*b.* RMP, 2:280. *Natica solida* Sowerby, 1846 (not *N. solida* Blainville, 1825).
1907*a.* AMNBA, 14:152, pl. 5, fig. 5. *Polynices santacruzensis.*
1914. NPRMP, 1(3):86 (Superpatagonico).

*Type Locality.*—Cañada de los Artilleros, Santa Cruz.

*Syntypes.*—#680, seven specimens.

*Other Lots.*—#681, Yegua Quemada, coll. Ameghino; #682, La Cueva, 12 specimens, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The species has affinities with *Polynices lacteus* (Guilding, 1830) which is Recent and ranges from North Carolina to Brazil. See note on *Natica tumbeziana* Ihering.

***santacruzensis,*** 1899. *Tellina* TELLINIDAE: MACOMINAE

1899*a.* NJMGP, 2:22, pl. 2, fig. 5.
1907*a.* AMNBA, 14:314. *Macoma.*

1914. NPRMP, 1(3):58. *Macoma* (Patagonico).

= *Macoma santacruzensis* (Ihering).
*Type Locality.*—Santa Cruz.
*Syntypes.*—#483, four casts, coll. J. Bicego, 1897.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***santacruzensis,*** 1897. *Terebra costellata* "var." TEREBRIDAE

1897*b*. RMP, 2:311. *Terebra costellata* Sow. ?"var."
1907*a*. AMNBA, 14:216. *Terebra quemadensis santacruzensis.*
1914. NPRMP, 1(3):112. *Terebra quemadensis santacruzensis* (Superpatagonico).

= *Terebra santacruzensis* Ihering.
*Type Locality.*—La Cueva, Santa Cruz.
*Holotype.*—#902, coll. Ameghino, 1895 (by monotypy).
*Other Lot.*—#903, Cañada de los Artilleros, three specimens.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***santacruzensis,*** 1897. *Trophon laciniatus* MURICIDAE

1897*b*. RMP, 2:294, pl. 3, fig. 4.
1907*a*. AMNBA, 14:182.
1904. RMLP, 11:230. *Trophon laciniatus.*
1914. NPRMP, 1(3):100 (Patagonico Inferior–Medio).

= *Trophon* (*Austrotrophon*) *lamellosus* (Gmelin, 1791).
*Type Locality.*—La Cueva, Santa Cruz.
*Holotype.*—#811, coll. Ameghino, 1895 (by monotypy).

*Other Lots.*—#812, Yegua Quemada, two specimens, coll. Ameghino; #814, Manantial Salado, four specimens, coll. Ameghino; #815, Pan de Azucar, four specimens, coll. Ameghino; #816, Owen Point, four specimens, received from Ortmann; #817, Cañada de los Artilleros, three specimens, coll. Ameghino; #818, Rada Tilly, one specimen, coll. Ameghino; #819, Punta Nodales, one specimen, coll. Ameghino; #820, Punta Casamayor, one specimen, coll. Ameghino; #822, Corral Foyel, one cast, coll. Hauthal.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***saxicava,*** 1907. *Barnea* PHOLADIDAE

1907*a*. AMNBA, 14:325, pl. 14, fig. 96.
1914. NPRMP, 1(3):63 (Patagonico Inferior).

*Type Locality.*—Bahía Camarones, Chubut.
*Type.*—Not in the collection.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species was based on an unique specimen listed in Ihering (1914), and because of the unsatisfactory illustration the species is of questionable status.

***schucherti,*** 1914. *Gibbula* ARCHITECTONICIDAE

1914. NPRMP, 1(3):74, pl. 3, fig. 10a–b (Patagonico Inferior).

= *Architectonica schucherti* (Ihering), **new combination.**
*Type Locality.*—Manantial Salado, Santa Cruz.
*Holotype.*—#856, coll. Ameghino, 1900 (by monotypy).

*Other Lots.*—#587, Cabo Tres Puntas, three specimens, coll. Ameghino, 1900; #588, Rada Tilly, one cast, coll. Ameghino, 1900; #589, Sierra de los Baguales, two casts, coll. Hauthal.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**scutata,** 1907. *Marcia* VENERIDAE: SAMARANGIINAE

1907*a*. AMNBA, 14:303, pl. 11, fig. 76.
1914. NPRMP, 1(3):52 (Patagonico).

= *Samarangia scutata* (Ihering).

*Type Locality.*—Punta Casamayor, Santa Cruz.

*Holotype.*—#737, coll. Ameghino (by monotypy).

*Other Lot.*—#435, Santa Cruz, eight casts, coll. Bicego, 1897.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species is close to the Recent *Samarangia exalbida* (Chemnitz, 1795). See also "*Marcia*" *scutata tehuelcha* Ihering.

**sehuena,** 1907. *Corbula* ?CORBICULIDAE

1907*a*. AMNBA, 14:51, text fig. 5 (Formation "Guaranitica").
1914. NPRMP, 1(3):62 (Cretáceo Superior).
1949–1950. Feruglio 1:258, 273, 274. *Eriphyla.*
1969. Parodiz, ACM, 40:101. *Eriphyla* (Paleocene).

= *Eriphyla sehuena* (Ihering).

*Type Locality.*—Mata Amarilla on the Sehuen River (also called Chalia), Santa Cruz (delimited by Parodiz, 1969).

*Lectotype.*—#509, coll. Ihering, deposited at CMNH (see *Remarks*).

*Stratigraphy.*—Sehuenan beds (Paleocene).

*Remarks.*—A lectotype was designated by Parodiz (1969) from Lot #509 based on specimens from the Ihering Collection received in exchange from Dr. Max Birabén, at that time Director of the Museo Argentino de Ciencias Naturales. *Eriphyla* Gabb, 1864, is known from the Mesozoic of the Archiplata of Bolivia and Ecuador, and also from the Tertiary in the Puca Formation (Paleocene).

**sierrana,** 1907. *Panopaea* [sic] HIATELLIDAE

1902. Ortmann, p. 154, pl. 30, fig. 2. *Panopaea* [sic] *quemadensis* Ihering.
1907*a*. AMNBA, 14:328, pl. 13, fig. 38.
1914. NPRMP, 1(3):65 (Patagonico).

= *Panopea*? *quemadensis* (Ihering).

*Type Locality.*—Sierra de los Baguales, Santa Cruz.

*Holotype.*—#520, one cast, coll. Hauthal (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—The type cast is only an upper portion not showing the characteristic surface that Ihering mentioned in the original description.

***Sphenaturia,*** 1921. NAUTILIDAE

1921. Physis, 5:76. New subgenus of *Aturia* Bronn.

*Type Species.—Aturia* (*Sphenaturia*) *brueggeni* Ihering, here designated.

*Stratigraphy.*—"Estratos de Boquerón" (below Patagonian Formation).

*Remarks.*—Described as a subgenus of *Aturia* Bronn, 1838, without original selection of a type species.

**splendida,** 1897. *Cytherea* VENERIDAE

1897*b*. RMP, 2:255, pl. 6, fig. 42 (Formação Santacruzense).
1907*a*. AMNBA, 14:302.
1914. NPRMP, 1(3):51. *Macrocallista iheringi* Cossmann (Superpatagonico).

= *Macrocallista iheringi* (Cossmann, 1895) (= *Amiantis* Carpenter, originally *Meretrix* Lamarck).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Syntypes.*—#423, 11 valves, one separated with a label: "*C. explendida* [sic] = *C. iheringi* Cossmann."

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**steinmanni,** 1897. *Turritella* TURRITELLIDAE

1897*b*. RMP, 2:289. Not figured.
1907*a*. AMNBA, 14:162. *Turritella ambulacrum steinmanni.*
1914. NPRMP, 1(3):88. *Turritella ambulacrum steinmanni* (Patagonico and Superpatagonico).

= *Turritella ambulacrum* Sowerby, 1846.

*Type Locality.*—Santa Cruz.

*Holotype.*—#712, coll. Ameghino (by monotypy).

*Other Lots.*—#713, Casamayor, three specimens, coll. Ameghino; #714, Manantial Salado, five specimens, coll. Ameghino; #715, Camarones, 40 specimens, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Turritella ambulacrum argentina* Ihering is also a synonym. Ihering (1897*b*:332) referred to *T.* cf. *steinmanni* from the Paraná Formation, which in Ihering (1907*a*) was included in the synonymy of *T. americana* Bravard, a common species of the Upper Miocene.

**striatissima,** 1903. *Rostellaria* STRUTHIOLARIIDAE

1903. AMNBA, 9:219, pl. 2, fig. 16.
1907*a*. AMNBA, 14:49. *Aporrhais striatissima.*
1914. NPRMP, 1(3):94 (Salamanqueano).

= *Struthiolaria striatissima* (Ihering).

*Type Locality.*—Río Chico, Chubut.

*Syntypes.*—#768, two specimens, coll. Ameghino.

*Stratigraphy.*—Salamanca Formation (Paleocene).

*Remarks.*—Other *Rostellaria* in the Ihering Collection correspond by priority to *Tibia,* but *striatissima* has the characteristics of a *Struthiolaria.*

**striatolamellata,** 1897. *Venus* VENERIDAE

1897*b*. RMP, 2:253, pl. 7, fig. 44 (Formação Santacruzense).
1902. Ortmann, p. 140, pl. 28, fig. 4. *Venus darwini* Ortmann.
1907*a*. AMNBA, 14:305. *Marcia.*
1914. NPRMP, 1(3):53. *Marcia* (Superpatagonico).

= *Samarangia*? *exalbida* (Chemnitz, 1795).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Syntypes.*—#437, four valves, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene); also Recent.

*Remarks.*—This species resembles *Venus navidaensis* Philippi from the Tertiary of Chile. "*Marcia*" *pupilla* Feruglio, 1935, from the Salamanca Formation is also very similar to *striatolamellata.*

***stromeri,*** 1914. *Fusus* RANELLIDAE: RANELLINAE

1914. NPRMP, 1(3):104. Not figured (Patagonico Medio).

= *Fusitriton stromeri* (Ihering), **new combination.**

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.

*Syntypes.*—#851, two specimens, coll. Ameghino; #852, southeast of Punta Nueva, one specimen, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—Ihering (1907*a*:194) assigned the specimens from Cabo Tres Puntas to *Fusus archimedis* Ortmann (1900:374).

***Struthiolaria*** sp. STRUTHIOLARIIDAE

1914. NPRMP, 1(3):96.

*Locality.*—Pio [Piso] Sehuen (Cretáceo superior).

*Specimens.*—#782, from Park-Aik, Santa Cruz, coll. Ameghino.

*Stratigraphy.*—Sehuenan Formation (Paleocene).

*Remarks.*—The "piso" Sehuen (Sehuenan) is a fresh–brackish-water stratigraphic unit of the Paleocene. The specimen, not well preserved, must be from debris of the Salamanca; it was not reported by Ihering (1907*a*), and probably is *S. prisca* Ihering.

***subrecta,*** 1899. *Siphonalia dilatata* FASCIOLARIIDAE: FUSININAE

1899*a*. NJMGP, 2:30.
1902. Ortmann, p. 211, pl. 34, fig. 4. *Siphonalia domeykoana* (Philippi).
1907*a*. AMNBA, 14:192. *Siphonalia subrecta.*
1914. NPRMP, 1(3):102 (Patagonico Medio–Super).

= *Fusinus subrectum* (Ihering).

*Type Locality.*—Santa Cruz.

*Syntypes.*—#842, five specimens, coll. J. Bicego, 1895.

*Other Lots.*—#843, Santa Cruz, one specimen received from Ortmann. #844, Cabo Tres Puntas, five specimens, coll. Ameghino; #845, Cañada de los Artilleros, six specimens, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Siphonalia nodocincta* Ihering and *S. matthewi* Ihering are synonyms of this name.

***subtenuis,*** 1897. *Natica* NATICIDAE

1897*b*. RMP, 2:284, text fig. 13 (Formação Santacruzense).
1907*a*. AMNBA, 14:157. *Polynices.*
1914. NPRMP, 1(3):86 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Holotype.*-#692, coll. Ameghino, 1895 (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species has affinities with *P. ortmanni* Ihering. It was reported by Wilckens (1911) from the Tertiary of Seymour Island, Antarctica, and may belong in *Magnatica* Marwick (1924:545), a genus described from the Miocene of New Zealand.

**subtrigona,** 1907. *Glycimeris* [sic] GLYCYMERIDIDAE

1907*a*. AMNBA, 14:241, pl. 7, fig. 53a–b (in text as fig. 23).
1914. NPRMP, 1(3):19 (Patagonico Inferior).

= *Glycymeris subtrigona* Ihering.

*Type Locality.*—Camarones, Chubut.

*Syntypes.*—#130, 32 valves, coll. Ameghino, 1900.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Glycymeris* Da Costa, 1778, was considered a *nomina conservanda* by the ICZN (Opinion 1414).

**suburbana,** 1907. *Crassatellites* CRASSATELLIDAE

1907*a*. AMNBA, 14:381, pl. 14, fig. 100a–b.

= *Crassatella suburbana* (Ihering).

*Type Locality.*—Puente Alsina, a suburb south of Buenos Aires city, from a perforation, 230 ft.

*Type.*—Not in the collection.

*Stratigraphy.*—Paraná Formation (Upper Miocene).

*Remarks.*—The only valve was described in great detail. There was no indication of collector (probably Ameghino).

**subventricosa,** 1897. *Eulima* EULIMIDAE

1897*b*. RMP, 2:274, text fig. 9.
1907*a*. AMNBA, 14:142.
1914. NPRMP, 1(3):81 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.

*Syntypes.*—#632, two specimens, coll. Ameghino.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—This species is a large (20 mm in length) ?*Eulima,* a rarity among the Patagonian gastropods, fossil or Recent.

**sulcolunularis,** 1907. *Venericardia* CARDITIDAE

1907*a*. AMNBA, 14:285, pl. 10, fig. 70a–b.
1914. NPRMP, 1(3):45 (Patagonico Medio).

*Type Locality.*—Bajo de las Flechas, Santa Cruz.

*Holotype.*—#367, coll. Ameghino, 1900 (by monotypy).

*Other Lots.*—#366, Golfo San Jorge, one complete specimen and four valves, coll. Ameghino, 1900; #368, Golfo San Jorge, three valves; #369, Pan de Azucar, two valves.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—In the 1914 catalogue a lot from Golfo San Jorge was listed as "Typo." This species resembles *Venericardia cossmanni* Ihering.

**suturalis,** 1897. *Odostomia* ?PYRAMIDELLIDAE

1897*b*. RMP, 2:275, text fig. 19 (Formação Santacruzense).
1902. Ortmann, p. 173, pl. 33, fig. 7a–b.

1907*a*. AMNBA, 14:143, pl. 4, fig. 13.
1914. NPRMP, 1(3):81 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.
*Holotype.*—#633, one specimen, coll. Ameghino (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—The type specimen is the one figured in Ihering (1907*a*). The original figure of 1897*b* is much different and must be an error. The acute spire and long "goniostome-like" aperture are unlike any Recent species.

***sylva,*** 1907. *Turritella ambulacrum* TURRITELLIDAE

1907*a*. AMNBA, 14:342. Not figured.
1914. NPRMP, 1(3):89 (Magellanico).

= *Turritella ambulacrum* Sowerby, 1846.
*Type Locality.*—Carmen Sylva, Chile.
*Syntypes.*—#716, two specimens, received from C. Backhausen.
*Stratigraphy.*—Magellanian Formation (Lower Oligocene).
*Remarks.*—Only two specimens remain of the five mentioned in the original description. See *Turritella ambulacrum argentina* Ihering, *T. a. steinmanni* Ihering, and *T. a. pyramidesia* Ihering.

***sylva,*** 1907. *Venericardia* CARDITIDAE

1907*a*. AMNBA, 14:346, pl. 14, fig. 98a–b (Magellanico).

*Type Locality.*—Carmen Sylva, Chile.
*Type.*—Not in the collection.
*Stratigraphy.*—Magellanian Formation (Lower Oligocene).

***tehuelcha,*** 1907. *Cucullaea* CUCULLAEIDAE

1907*a*. AMNBA, 14:5, pl. 1, fig. 3a–b (Rocanéen).

*Type Locality.*—Roca, Río Negro.
*Type.*—Not in the collection.
*Stratigraphy.*—Roca Formation (Paleocene).
*Remarks.*—This species was based on a cast and the generic assignment is uncertain. The locality indicates the Roca Formation, but there are no *Cucullaea* from the Paleocene in the Ihering Collection.

***tehuelcha,*** 1914. *Marcia scutata* VENERIDAE: SAMARANGIINAE

1914. NPRMP, 1(3):53. Not figured; title of original description states "*subsp. n.,*" but description says "variedade" (Formação Araucana).

= ?*Samarangia exalbida* (Chemnitz, 1795).
*Type Locality.*—Between San Jorge and Deseado, Santa Cruz.
*Holotype.*—#436, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Araucanean Formation (Pliocene); Recent.

***tehuelcha,*** 1907. *Psammobia* PSAMMOBIIDAE

1907*a*. AMNBA, 14:417, pl. 17, fig. 112a–b.
1914. NPRMP, 1(3):58 (Formação Araucana).

= *Gari tehuelcha* (Ihering).

*Type Locality.*—Sierra Laziar, Santa Cruz.
*Syntypes.*—#480, three valves, coll. Ameghino, 1900.
*Stratigraphy.*—Araucanean Formation (Lower Pliocene).
*Remarks.*—*Psammobia* Lamarck, 1817, is a synonym of *Gari* Schumacher, 1817.

***tehuelcha,*** 1907. *Pupilia aperta* FISSURELLIDAE

1907*a*. AMNBA, 14:399. Not figured.
1914. NPRMP, 1(3):72 (Formação Araucana).

= *Fissurellidea megatrema* d'Orbigny, 1841.
*Type Locality.*—Sierra Laziar, Santa Cruz.
*Holotype.*—#566, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Araucanean Formation (Lower Pliocene); also Recent.
*Remarks.*—The species described by Sowerby (1892) as *Pupilia aperta* was from South Africa.

***tehuelcha,*** 1899. *Tellina* PSAMMOBIIDAE

1899*a*. NJMGP, 2:21, pl. 2, fig. 4.
1907*a*. AMNBA, 14:313. *Sanguinolaria.*
1914. NPRMP, 1(3):58. *Sanguinolaria* (Patagonico).

= *Sanguinolaria tehuelcha* (Ihering).
*Type Locality.*—Santa Cruz.
*Holotype.*—#482, cast with pieces of the original valve, coll. Ameghino, 1900 (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***tehuelchana,*** 1907. *Venericardia* CARDITIDAE

1902. Ameghino, ASCA, 54:190. *Cardita tehuelchana* Ihering, *in litteris.*
1907*a*. AMNBA, 14:412, pl. 16, fig. 107a–b. *Venericardia.*
1914. NPRMP, 1(3):45 (Formação Araucana).

*Type Locality.*—Sierra Laziar, Santa Cruz.
*Syntypes.*—#371, 16 valves, coll. Ameghino.
*Stratigraphy.*—Araucanean Formation (Lower Pliocene).

***tehuelchum,*** 1907. *Calliostoma* TROCHIDAE

1907*a*. AMNBA, 14:437, pl. 17, fig. 115a–b.
1914. NPRMP, 1(3):74 (Pampeano).

= *Calliostoma consimilis* Smith, 1881. Recent.
*Type Locality.*—Puerto Deseado, Santa Cruz.
*Holotype.*—#615, coll. Ameghino, 1907 (by monotypy).
*Stratigraphy.*—Deseado beds, corresponds to the Belgrano Formation of the north (Pleistocene).
*Remarks.*—The original description indicates a unique specimen, but Ihering (1914) list two specimens in error.

***tenuis,*** 1907. *Corbicula* CORBICULIDAE

1907*a*. AMNBA, 14:468, pl. 18, fig. 13c.
1914. NPRMP, 1(3):41 (Formação Entreriana).

1920. Frenguelli, 24:108.
1969. Parodiz, ACM, 40:98, pl. 10, fig. 12, 13. *Neocorbicula tenuis* (Ihering).

*Type Locality.*—Paraná, Entre Rios.

*Syntypes.*—#337, four valves, labelled as "cotypos."

*Other Lot.*—#338, La Paz, Entre Rios, conglomerate with numerous impressions of valves, coll. S. Roth.

*Stratigraphy.*—Paraná Formation (Upper Miocene).

*Remarks.*—Frenguelli (1920) said that he found "thousands" of badly preserved shells in the deposits at Paraná; these were probably *Cyanocyclas limosa* (Maton), as *Corbicula tenuis* is very rare in collections. Ihering said that the specimens were found in a mass of clay from the Bravard collection that also contained *Diplodon fraus* Ihering. *Corbicula tenuis* Ihering is the type species of the subgenus *Corbiculella* Ihering, 1907.

***thomasi,*** 1914. *Panopaea* [sic] HIATELLIDAE

1914. NPRMP, 1(3):63, pl. 2, fig. 8a–b (Cretáceo Superior).

= *Panopea thomasi* Ihering.

*Type Locality.*—Río Chico, Chubut.

*Type Material.*—#474, two casts, coll. Ameghino. The figured specimen, 27 mm long, is here designated the lectotype.

*Stratigraphy.*—Salamanca Formation (Paleocene).

***trespunta,*** 1907. *Cerithiopsis* CERITHIOPSIDAE

1907*a*. AMNBA, 14:168, text fig. 6.
1908. Cossmann, p. 104. *Colina trespunta* (Ihering).
1914. NPRMP, 1(3):93 (Patagonico Medio).

*Type Locality.*—Cabo Tres Puntas, Santa Cruz.

*Holotype.*—#751, coll. Ameghino (by monotypy).

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

*Remarks.*—*Cerithiopsis emersoni* (C. B. Adams, 1839), Recent, is a very similar species occurring from Massachusetts to Brazil.

***tricesima,*** 1897. *Nucula* NUCULIDAE

1897*b*. RMP, 2:243, pl. 4, fig. 21, and pl. 5, fig. 27.
1907*a*. AMNBA, 14:226 (Superpatagonico).
1914. NPRMP, 1(3):13 (Superpatagonico).

*Type Locality.*—La Cueva, Santa Cruz.

*Lectotype.*—#75, coll. Ameghino, 1895. The original description reports three specimens, broken; only one remains in the collection, and is here designated the lectotype.

*Stratigraphy.*—Patagonian Formation (Lower Miocene).

***tricincta,*** 1897. *Turritella* TURRITELLIDAE

1897*b*. RMP, 2:pl. 3, fig. 3 (Formação Santacruzense).
1902. Ortmann, p. 135, pl. 31, fig. 14a–b. *Turritella breantiana* d'Orbigny.
1907*a*. AMNBA, 14:165, pl. 5, fig. 24. *Turritella iheringi* Cossmann.
1914. NPRMP, 1(3):90. *Turritella iheringi* Cossmann (Superpatagonico).

= ?*Turritella breantiana* d'Orbigny, 1847.

*Type Locality.*—Yegua Quemada, Santa Cruz.
*Syntypes.*—#732, ten specimens, coll. Ameghino.
*Other Lots.*—#733, La Cueva, one specimen, coll. Ameghino; #734, Cañada de los Artilleros, 18 specimens, coll. Ameghino.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—There are no specimens in the collection under *Turritella tricincta* and all material of that species are labelled *T. iheringi* as listed in the catalogue (Ihering, 1914:90–91).

***tridentata,*** 1897. *Cuculearia* [sic] ARCIDAE

1897*b*. RMP, 2:237, pl. 4, fig. 22, and pl. 5, fig. 28.
1907*a*. AMNBA, 14:233. *Cucullaria.*
1914. NPRMP, 1(3):15.

= *Barbatia tridentata* (Ihering), **new combination.**
*Type Locality.*—Yegua Quemada, Santa Cruz.
*Syntypes.*—#98, two broken valves, coll. Ameghino, 1895.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—The original description reports "an unique specimen." "*Cuculearia*" was an error for *Cucullaria.*

***tumbeziana,*** 1907. *Natica* NATICIDAE

1907*a*. AMNBA, 14:153. New name for *Natica darwini* in Philippi (1887:80, pl. 9, fig. 28), not *Natica darwini* Hutton, 1886 (the latter in turn a new name for *Natica solida* Sowerby [1846]), not *Natica solida* Blainville (1825).

*Type Locality.*—"Formation Crétacée, Chile" (Philippi, 1887).
*Stratigraphy.*—Probably the Navidad Formation (Miocene).
*Remarks.*—In the collection there is a single cast from Lebu, Chile, received from R. A. Philippi as "*Polynices*" *darwini* Hutton, but no specimens labelled as *N. tumbeziana.* Ihering (1907*a*:89) said that "*Polynices Carolodarwini* Ih. ['est substitué dans la Nouvelle-Zelandé] par *P. darwini* Hutton." I have not found any previous reference to *Polynices carolodarwini.*

***unifascialis,*** 1897. *Pleurotoma discors* "var." TURRIDAE

1897*b*. RMP, 2:312. Discussed under *Pleurotoma discors* Sowerby.
1902. Ortmann, p. 239, pl. 36, fig. 7a–b. *Pleurotoma discors* "Var."
1907*a*. AMNBA, 14:219, pl. 7, fig. 45. *Pleurotoma unifascialis.*
1914. NPRMP, 1(3):113 (Superpatagonico).

*Type Locality.*—Yegua Quemada, Santa Cruz.
*Holotype.*—#909, coll. Ameghino (by monotypy).
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This species probably belongs in *Bathystoma. Pleurotoma* Link, 1807 (= *Turris* Röding, 1798).

***usurpator,*** 1907. *Lotorium* (*Lampusia*) RANELLIDAE: CYMATIINAE

1907*a*. AMNBA, 14:175, pl. 5, fig. 28a–b.
1914. NPRMP, 1(3):98 (Superpatagonico).

= *Cymatium usurpator* (Ihering), **new combination.**
*Type Locality.*—Rada Tilly, Santa Cruz.

*Syntypes.*—#794, two specimens, coll. Ameghino, 1900.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—*Cymatium usurpator* (Ihering) and *C. rada* (Ihering) are both from the same locality and strata, but they can be distinguished by their shape and sculpture.

**valchetanus,** 1907. *Pododesmus* ANOMIIDAE

1907*a*. AMNBA, 14:267, pl. 10, fig. 64a–b.
1914. NPRMP, 1(3):27 (Patagonico).

*Type Locality.*—"Travesia" Valcheta, Gualicho River, Río Negro.
*Syntypes.*—#216, seven upper valves (12 were listed in the original description), coll. C. Burmeister, 1887.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).

**vindex,** 1907. *Chione* VENERIDAE

1907*a*. AMNBA, 14:416, pl. 16, fig. 11a–b.
1914. NPRMP, 1(3):55 (Formación Araucana).

= *Protothaca antiqua* (King).
*Type Locality.*—Sierra Laziar, Santa Cruz.
*Holotype.*—#454, one broken valve, coll. Ameghino (by monotypy).
*Stratigraphy.*—Araucanean Formation (Lower Pliocene); Recent.

**waltheri** "Ihering," 1931. *Planorbis* PLANORBIDAE

1931. Walther, BIGU, 13:192. Name credited to Ihering *in litteris*.
1958. Caorsi and Goñi, BIGU, 37:58.
1969. Parodiz, ACM, 40:165, pl. 18, fig. 1. *Taphius walteri* (emended as *waltheri*).

= *Taphius waltheri* Parodiz (= *Biomphalaria waltheri* [Parodiz]).
*Remarks.*—Describing *Taphius walteri* [sic] (= *waltheri*; Parodiz, 1969), I used the name which was a *nomen nudum* in Walther (1931) because it was frequently mentioned as such in the Uruguayan geological literature. *Taphius* Adams and Adams, 1855, is the most abundant genus of South American planorbids; the name was arbitrarily synonymized by the ICZN under the African *Biomphalaria* Preston, 1910, on the grounds that the two genera are anatomically the same, but disregarding the 50-year rule for conservation of names. The type locality for *Taphius walteri* [sic] Parodiz, 1969, is Palmitas, Soriano, southeastern Uruguay, from the Fray Bentos Formation (Miocene). The holotype in CMNH is a specimen collected by A. Berro in 1927.

**whitei,** 1903. *Pseudotylostoma* NATICIDAE

1903. AMNBA, 9:307. New name for *Tylostoma torrubiae* in White, 1887, not *T. torrubiae* Sharpe, 1849.

= *Ampullina* (*Pseudotylostoma*) *whitei* (Ihering).
*Type Locality.*—Sergipe, Brazil.
*Stratigraphy.*—?"Upper Cretaceous."

**wilckensi,** 1907. *Ostrea* OSTREIDAE

1907*a*. AMNBA, 14:13, pl. 2, fig. 10a–b, and pl. 3, fig. 10c.
1914. NPRMP, 1(3):23 ("cretáceo superior horizonte medio").

*Syntypes.*—#163, two valves.
*Stratigraphy.*—Roca Formation (Paleocene).

***Zygochlamys,*** 1907. PECTINIDAE

1907*a*. AMNBA, 14:250. New subgenus of *Chlamys* Röding.

*Type Species.*—*Chlamys geminata* Sowerby.
*Stratigraphy.*—Patagonian Formation (Lower Miocene).
*Remarks.*—This subgenus includes *C. fissocostatus* Ihering, *C. nodosoplicatus* Ihering, *C. quemadensis* Ihering, and *C. jorgensis* Ihering. For a revision of *Zygochlamys,* see Morra (1985).

## SYNONYMIC LIST OF FOSSIL TAXA DESCRIBED BY IHERING

All names proposed by Ihering are organized below in a synonymic list following the classification of Vaught (1989). The placement of some fossil taxa follows Wenz (1938). Names of the species group and of the genus group are alphabetically arranged under higher categories (family level and above). Original combinations of names proposed by Ihering are in boldface; all synonyms are indented below the name considered valid. In some cases, combinations are unknown or tentative, and this uncertainty is indicated by placing the genus-group name within quotation marks (e.g., "*Gibbula*").

PHYLUM ANNELIDA
Class Polychaeta
            ***"Vermetus" julianus* Ihering, 1907**

PHYLUM MOLLUSCA
Class Gastropoda
  Subclass Prosobranchia
    Order Archaeogastropoda
        Superfamily Pleurotomarioidea
          Family Raphistomatidae
            ***"Gibbula" philippii* Ihering, 1907**

        Superfamily Fissurelloidea
          Family Fissurellidae
            *Fissurellidea megatrema* d'Orbigny, 1841
              ***Pupilia aperta tehuelcha* Ihering, 1907**

        Superfamily Patelloidea
          Family Fissurellidae
            *Cellana lucifera* (Ihering, 1904)
              ***Helcioniscus luciferus* Ihering, 1904**
              ***Helcioniscus luciferus patagonicus* Ihering, 1904**

        Superfamily Trochoidea
          Family Trochidae
            ***Calliostoma camaronesium* Ihering, 1907**
            *Calliostoma consimilis* Smith, 1881
              ***Calliostoma tehuelchum* Ihering, 1907**
            ***Calliostoma militaris* Ihering, 1907**
              *Calliostoma amazonicum* Finlay, 1930

            - ***Calliostoma bellicosum* Ihering, 1907**
            - ***Calliostoma dalli* Ihering, 1907**
            - *Calliostoma quequensis* Carcelles, 1944
        - *Calliostoma jucundum* (Gould, 1849)
            - ***Calliostoma lahillei* Ihering, 1907**
        - ***Calliostoma laziarium* Ihering, 1907**
        - ***Calliostoma puntasium* Ihering, 1907**
        - **“*Gibbula*” *osborni* Ihering, 1914**
        - *Tegula patagonica* (d’Orbigny, 1840)
            - ***Neomphalius princeps* Ihering, 1907**
        - *Tegula abava* (Ihering, 1907), **new combination**
            - ***Neomphalius abavus* Ihering, 1907**
        - *Tegula* (*Promartynia*) *americana* (Ihering, 1907), **new combination**
            - ***Neomphalius americanus* Ihering, 1907**

    - Family Turbinidae
        - **“*Calliostoma*” *deseadense* Ihering, 1914**

- Order Mesogastropoda
    - Superfamily Cerithioidea
        - Family Potamididae
            - ***Potamides patagonensis* Ihering, 1897**
        - Family Pleuroceridae
            - *Paleoanculosa bullia* (Ihering, 1907)
                - ***Melania bullia* Ihering, 1907**
                - *Melania pehuenchensis* Doello-Jurado, 1927
                - *Melania ameghiniana* Doello-Jurado, 1927
        - Family Turritellidae
            - *Turritella ambulacrum* Sowerby, 1846
                - ***Turritella ambulacrum sylva* Ihering, 1907**
                - ***Turritella ambulacrum pyramidesia* Ihering, 1907**
                - ***Turritella argentina* Ihering, 1897**
                - ***Turritella steinmanni* Ihering, 1897**
            - ***Turritella ameghinoi* Ihering, 1903**
            - *Turritella breantiana* d’Orbigny, 1847
                - ***Turritella breantiana* “var.” *camaronesia* Ihering, 1907**
                - ***Turritella breantiana* “var.” *indecussata* Ihering, 1899**
                - *Turritella iheringi* Cossmann, 1898
                - ***Turritella tricincta* Ihering, 1897**
            - *Turritella doeringi* Böhm, 1903
                - ***Turritella burckhardti* Ihering, 1903**
            - ***Turritella cahuillensis* Ihering, 1907**
            - ***Turritella hauthali* Ihering, 1907**
            - ***Turritella malaspina* Ihering, 1903**
        - Family Siliquariidae
            - *Siliquaria cossmanni* (Ihering, 1907)
                - ***Tenagodus cossmanni* Ihering, 1907**

Family Vermetidae
  *Dendropoma multicoronatus* (Ihering, 1907), **new combination**
    ***Vermetus multicoronatus* Ihering, 1907**
  *Petaloconchus chicoanus* (Ihering, 1907)
    ***Vermetus chicoanus* Ihering, 1907**

Superfamily Strombоidea
Family Struthiolariidae
  ***Struthiolaria ameghinoi* Ihering, 1897**
  *Struthiolaria chilensis* Philippi, 1887
    ***Struthiolaria chilensis fuegina* Ihering, 1907**
  *Struthiolaria ornata* Sowerby (1846)
    ***Struthiolaria ornata* "var." *densestriata* Ihering, 1897**
  ***Struthiolaria prisca* Ihering, 1907**
    ***Struthiolaria* sp., Ihering, 1914**
  *Struthiolaria striatissima* (Ihering, 1903)
    ***Rostellaria striatissima* Ihering, 1903**

Family Aporrhaidae
  ***Rostellaria chubutensis* Ihering, 1903**
  *Aporrhais cossmanni* (Ihering, 1903)
    ***Rostellaria cossmanni* Ihering, 1903**
  *Drepanocheilus santacruzensis* (Ihering, 1907), **new combination**
    ***Chenopus santacruzensis* Ihering, 1907**

Family Strombidae
  *Tibia patagonensis* (Ihering, 1903)
    ***Rostellaria patagonensis* Ihering, 1903**
    *Aporrhais rocai* Böhm, 1903, *nomen nudum*
  *Tibia rothi* (Ihering, 1903)
    ***Rostellaria rothi* Ihering, 1903**

Superfamily Crepiduloidea
Family Crepidulidae
  *Calyptraea pileus* Lamarck, 1822
    ***Calyptraea pileus* "var." *juliana* Ihering, 1907**
  ***Calyptraea pueyrredona* Ihering, 1907**
    ***Calyptraea levuana* Ihering, 1907** [junior objective synonym]

Superfamily Naticoidea
Family Naticidae
  *Ampullina* (*Pseudotylostoma*) Ihering, 1903
    ***Pseudotylostoma* Ihering, 1903**
  *Ampullina* (*Pseudotylostoma*) *rochai* (Ihering, 1907)
    ***Tylostoma rochai* Ihering, 1907**
  *Ampullina* (*Pseudotylostoma*) *romeroi* (Ihering, 1903)
    ***Pseudotylostoma romeroi* Ihering, 1903**
  *Ampullina* (*Pseudotylostoma*) *whitei* (Ihering, 1903)
    ***Pseudotylostoma whitei* Ihering, 1903**
  *Lunatia magellanica* Hombron and Jacquinot, 1834
    ***Natica consimilis* Ihering, 1897**
  *Lunatia pyrotheriana* (Ihering, 1907), **new combination**
    ***Polynices pyrotheriana* Ihering, 1907**

***Polynices carolodarwini* Ihering, 1907** [*nomen nudum*]
*Polynices famula* (Philippi, 1887)
***Polynices jorgensis* Ihering, 1907**
***Polynices ortmanni* Ihering, 1907**
***Polynices puntarenasensis* Ihering, 1907**
***Polynices santacruzensis* Ihering, 1897**
***Natica subtenuis* Ihering, 1897**
***Natica tumbeziana* Ihering, 1907**

Superfamily Tonnoidea
Family Ranellidae
*Cymatium bicegoi* (Ihering, 1899)
***Lotorium bicegoi* Ihering, 1899**
*Cymatium* (*Cabestana*) *felipponei* (Ihering, 1907) [emendation]
***Lotorium filipponei* [sic] Ihering, 1907**
*Cymatium usurpator* (Ihering, 1907), **new combination**
***Lotorium* (*Lampusia*) *usurpator* Ihering, 1907**
*Fusitriton dautzembergi* (Ihering, 1897), **new combination**
***Triton* (*Argobuccinum*) *dautzembergi* Ihering, 1897**
*Fusitriton stromeri* (Ihering, 1914), **new combination**
***Fusus stromeri* Ihering, 1914**
*Semitriton rada* (Ihering, 1907), **new combination**
***Lotorium* (*Lampusia*) *rada* Ihering, 1907**

Superfamily Cerithiopsoidea
Family Cerithiopsidae
***Cerithiopsis juliana* Ihering, 1907**
***Cerithiopsis trespunta* Ihering, 1907**
Superfamily Epitonioidea
Family Epitoniidae
*Epitonium chubutianum* (Ihering, 1907), **new combination**
***Scalaria chubutiana* Ihering, 1907**
*Opalia* (*Nodiscala*) *quemadensis* (Cossmann), **new combination**
***Scalaria cossmanni* Ihering, 1907**
*Opalia* (*Nodoscala*) *rugulosa* (Sowerby, 1846)
***Scalaria rugulosa* "var." *paucicostata* Ihering, 1907**

Superfamily Eulimoidea
Family Eulimidae
***Eulima subventricosa* Ihering, 1897**

Order Neogastropoda
Superfamily Muricoidea
Family Muricidae
*Crassilabrum jorgensis* (Ihering, 1907), **new combination**
***Hadriania jorgensis* Ihering, 1907**
*Crassilabrum hatcheri* (Ortmann, 1900)
***Hadriania lacustris* Ihering, 1907**
*Ocenebra* (*Ocinebrina*) *elegans* (Ortmann, 1900), **new combination**
***Urosalpinx archipatagonica* Ihering, 1907**
***Urosalpinx elegans* "var." *juliana* Ihering, 1907**

- *Thais* (*Stramonita*) Schumacher, 1817
  - ***Trophon* (*Entacanthus*) Ihering, 1907**
- *Thais* (*Stramonita*) *monoceros* (Ihering, 1907), **new combination**
  - ***Trophon monoceros* Ihering, 1907**
- *Trophon chicoanus* (Ihering, 1907), **new combination**
  - ***Hadriania jorgensis* "var." *chicoana* Ihering, 1907**
- ***Trophon inornatus* "var." *gradata* Ihering, 1907** [*nomen nudum*]
- *Trophon lamellosus* (Gmelin, 1791)
  - ***Trophon inornatus fairus* Ihering, 1907**
  - ***Trophon laciniatus santacruzensis* Ihering, 1897**
  - ***Trophon necocheanus* Ihering, 1907**
- ***Trophon pyriformis* Ihering, 1897**
- *Trophon varians* (d'Orbigny, 1841)
  - ***Trophon varians* "var." *gradata* Ihering, 1897**
  - ***Trophon varians montenus* Ihering, 1907**
- ***Urosalpinx ortmanni* Ihering, 1907**
  - *Urosalpinx "pleurotomoides"* Cossmann, 1903

Family Buccinidae

- ***Cominella* (*Austrocominella*) Ihering, 1907**
- ***Cominella fueguensis* Ihering, 1907**
- *Cominella minor* (Philippi, 1887)
  - ***Cominella cossmanni* Ihering, 1907**
- ***Cominella golfonia* Ihering, 1914**
- ***Cominella* sp., Ihering, 1914** [unidentifiable]
- *Gibbula iheringi* Cossmann, 1899
  - ***Gibbula iheringi* "var." *golfina* Ihering, 1907**
- ***Tritonidea borcherti* Ihering, 1907**

Family Columbellidae

- ***Columbella (Anachis) improvisa* Ihering, 1914**
- *Anachis moleculina* (Duclos, 1840)
  - ***Columbella rioplatensis* Ihering, 1907**

Family Nassariidae

- *Buccinanops gradatum* (Deshayes, 1844)
  - ***Bullia gradata pampeana* Ihering, 1907**

Family Fasciolariidae

- *Fusinus quemadensis* (Ihering, 1907)
  - ***Fusus quemadensis* Ihering, 1907**
- *Fusinus subrectum* (Ihering, 1899)
  - ***Siphonalia dilatata subrecta* Ihering, 1899**
  - ***Siphonalia nodocincta* Ihering, 1907**
  - ***Siphonalia matthewi* Ihering, 1914**

Family Volutidae

- *Adelomelon ameghinoi* (Ihering, 1896), **new combination**
  - ***Voluta ameghinoi* Ihering, 1896**
- *Adelomelon burmeisteri* (Ihering, 1907), **new combination**
  - ***Cymbiola burmeisteri* Ihering, 1907**
- *Adelomelon cannada* (Ihering, 1907), **new combination**

***Cymbiola becki* "var." *cannada* Ihering, 1907**
*Adelomelon cossmanni* (Ihering, 1907)
***Proscaphella cossmanni* Ihering, 1907**
*Adelomelon ferugliói* (Doello-Jurado, 1931)
**Cymbiola (*Pachycymbiola*) sp., Ihering, 1914**
*Adelomelon* (*Pachycymbiola*) *pilsbryi* (Ihering, 1899)
***Voluta pilsbryi* Ihering, 1899**
*Enaeta dalli* (Ihering, 1907), **new combination**
***Lyria dalli* Ihering, 1907**
*Miomelon* Dall, 1907
***Proscaphella* Ihering, 1907**
*Miomelon gracilior* (Ihering, 1896)
***Voluta gracilior* Ihering, 1896**
*Miomelon quemadensis* (Ihering, 1896)
***Voluta quemadensis* Ihering, 1896**

Family Olividae
***Olivancillaria prisca* Ihering, 1907**

Family Marginellidae
*Marginella* (*sensu lato*) *deuterolivella* (Ihering, 1907)
***Volvaria deuterolivella* Ihering, 1907**
*Neoimbricaria quemadensis* (Ihering, 1897)
***Marginella confinis* Ihering, 1897**
***Marginella gracilior* Ihering, 1897**
***Marginella quemadensis* Ihering, 1897**
***Neoimbricaria quemadensis* "var." *juliana* Ihering, 1907**
***Marginella pruniformis* Ihering, 1907**
***Marginella* sp., Ihering, 1914** [unidentifiable]
***Marginella* (*Volvaria*) sp., Ihering, 1914** [unidentifiable]
*Neoimbricaria patagonica* (Ihering, 1897
***Voluta patagonica* Ihering, 1897**
*Neoimbricaria plicifera* (Ihering, 1897)
***Marginella plicifera* Ihering, 1897**

Family Costellariidae [Vexillidae]
*Vexillum patagonicus* (Ihering, 1907)
***Vulpecula patagonica* Ihering, 1907**

Superfamily Cancellarioidea
Family Cancellariidae
*Admete ameghinoi* (Ihering, 1897)
***Cancellaria ameghinoi* Ihering, 1897**
***Cancellaria gracilis* Ihering, 1897**
***Cancellaria gracilis* "var." *observatoria* Ihering, 1907**
*Naronia* (*Sveltia*) *major* (Ihering, 1899), **new combination, new status**
***Cancellaria gracilis* "var." *major* Ihering, 1899**

Superfamily Conoidea
Family Conidae
*Conus clenchi* Martins, 1943

          - ***Conus* sp., Ihering, 1907**
          - *Conus carcellesi* Martins, 1945

      - Family Turridae
        - ***Genota cuevensis* Ihering, 1897**
          - ***Genotia cruzensis* Ihering, 1907**
        - ***Pleurotoma discors* "var." *unifascialis* Ihering, 1897**
        - ***Pleurotoma jorgensis* Ihering, 1907**
        - ***Pleurotoma santacruzensis* Ihering, 1907**

      - Family Terebridae
        - *Terebra quemadensis* Ihering, 1897
          - ***Terebra costellata* "var." *quemadensis* Ihering, 1897**
        - *Terebra santacruzensis* Ihering, 1897
          - ***Terebra costellata* "var." *santacruzensis* Ihering, 1897**

- Subclass Heterobranchia
    - Superfamily Architectonicoidea
      - Family Architectonicidae
        - *Architectonica schucherti* (Ihering, 1914), **new combination**
          - ***Gibbula schucherti* Ihering, 1914**
        - *Valdesia dalli* (Ihering, 1897)
          - ***Gibbula cuevensis* "var." *aequistriata* Ihering, 1907**
          - ***Gibbula dalli* Ihering, 1897**
          - ***Gibbula dubiosa* Ihering, 1907**
          - ***Gibbula fracta* "var." *cuevensis* Ihering, 1897**
        - *Valdesia fracta* (Ihering, 1897)
          - ***Gibbula fracta* Ihering, 1897**

    - Superfamily Pyramidelloidea
      - Family Pyramidellidae
        - ***Odostomia suturalis* Ihering, 1897**
        - ***Turbonilla clessini* Ihering, 1907**
          - *Turbonilla iheringi* Clessin, 1900:174 [primary junior homonym]
        - ***Turbonilla cuevensis* Ihering, 1897**
        - *Turbonilla iheringi* Cossmann, 1899
          - ***Turbonilla eopatagonica* Ihering, 1907** [unnecessary replacement name]
        - *Turbonilla iheringi* Clessin, 1900:168 [primary junior homonym without replacement name]
        - ***Turbonilla observationis* Ihering, 1907**
        - *Turbonilla uruguayensis* Pilsbry, 1897
          - ***Turbonilla querandina* Ihering, 1907**

- Subclass Opisthobranchia
  - Order Cephalaspidea
    - Superfamily Philinoidea
      - Family Actaeonidae
        - ***Actaeon argentinus* Ihering, 1907**
        - ***Actaeon patagonicus* Ihering, 1907**

Family Ringiculidae
  ***Ringicula magellanica* Ihering, 1907**

Family Scaphandridae
  *Cylichna juliana* (Ihering, 1907)
    ***Bullinella juliana* Ihering, 1907**
  ***Tornatina camaronesia* Ihering, 1907**
  *Tornatina candei* d'Orbigny, 1841
    ***Tornatina militaris* Ihering, 1907**

Family Bullidae
  ***Bulla arenasia* Ihering, 1907**
  ***Bulla pachychila* Ihering, 1907**

Family Retusidae
  *Retusa patagonica* (Ihering, 1897), **new combination**
    ***Bulla patagonica* Ihering, 1897**
    ***Bulla patagonica* "var." *jorgensis* Ihering, 1907**
  ***Volvulella cannada* Ihering, 1907**

Subclass Pulmonata
  Order Basommatophora
    Superfamily Siphonarioidea
      Family Siphonariidae
        *Siphonaria lessoni* (Blainville, 1826)
          ***Siphonaria lessoni pampa* Ihering, 1914**

    Superfamily Planorboidea
      Family Planorbidae
        *Biomphalaria waltheri* (Parodiz, 1969)
          ***Planorbis waltheri* "Ihering," ex Walther, 1931**
          *Taphius walteri* [sic] Parodiz, 1969 [incorrect original spelling]
          *Taphius waltheri* Parodiz, 1969 [emendation]

  Order Stylommatophora
    Suborder Sigmurethra
      Superfamily Orthalicoidea
        Family Orthalicidae
          *Peronaeus (Lissoacme) ameghinoi* (Ihering, 1908)
            ***Bulimulus ameghinoi* Ihering, 1908**
            ***Bulimulus sporadicus pampa* Ihering, 1914**
            *Peronaeus (Lissoacme) ameghinoi madrynensis* Parodiz, 1944

      Superfamily Strophocheiloidea
        Family Strophocheilidae
          *Strophocheilus charruanus* (Frenguelli, 1930)
            ***Bulimus archiplata* "Ihering" ex Walther, 1931** [*nomen nudum*]
          ***Strophocheilus chubutensis* Ihering, 1904**

        Family Megalobulimidae
          *Megalobulimus hauthali* (Ihering, 1904)
            ***Strophocheilus hauthali* Ihering, 1904**
            *Strophocheilus avus* Parodiz, 1949

Class Cephalopoda
  Subclass Nautiloidea
    Order Nautilida
        Family Nautilidae
          ***Aturia caroloameghinoi* Ihering, 1902**
          ***Aturia (Sphenaturia)* Ihering, 1921**
          *Aturia (Sphenaturia) brueggeni* Ihering, 1921
            ***Aturia (Sphenaturia) brüggeni* [sic] Ihering, 1921**
          ***Aturia (Sphenaturia) felschi* Ihering, 1921**
          ***Nautilus romeroi* Ihering, 1903**

Class Bivalvia
  Subclass Protobranchia
    Order Nuculoida
      Superfamily Nuculoidea
        Family Nuculidae
          ***Nucula dynastes* Ihering, 1907**
          ***Nucula observatoria* Ihering, 1907**
          ***Nucula tricesima* Ihering, 1897**

      Superfamily Nuculanoidea
        Family Nuculanidae
          *Nuculana camaronesia* (Ihering, 1907)
            ***Leda camaronesia* Ihering, 1907**
          *Nuculana entreriana* (Ihering, 1907)
            ***Leda entreriana* Ihering, 1907**
          *Nuculana ortmanni* (Ihering, 1907)
            ***Leda ortmanni* Ihering, 1907**
          *Nuculana pueyrredona* (Ihering, 1907)
            ***Leda pueyrredona* Ihering, 1907**

  Subclass Pteriomorphia
    Order Arcoida
      Superfamily Arcoidea
        Family Arcidae
          *Anadara camaronesia* (Ihering, 1907), **new combination**
            ***Arca camaronesia* Ihering, 1907**
          *Anadara juliana* (Ihering, 1907), **new combination**
            ***Arca juliana* Ihering, 1907**
          ***Arca panensis* Ihering, 1914**
          *Arca umbonata* Lamarck, 1819
            ***Arca patagonica* Ihering, 1897**
          *Barbatia (Cucullaria) ameghinoi* (Ihering, 1907), **new combination**
            ***Cucullaria ameghinoi* Ihering, 1907**
          *Barbatia tridentata* (Ihering, 1897), **new combination**
            ***Cuculearia* [sic] *tridentata* Ihering, 1897**
          *Noetia ameghinorum* (Ihering, 1907)
            ***Venericardia ameghinorum* Ihering, 1907**

        Family Cucullaeidae
          *Cucullaea alta* Sowerby, 1846

            ***Cucullaea dalli* Ihering, 1897**
          ***Cucullaea multicostata* Ihering, 1897**
          ***Cucullaea rocana* Ihering, 1903**
          ***Cucullaea tehuelcha* Ihering, 1907**

      Superfamily Limopsoidea
        Family Glycymerididae
          *Glycymeris camaronesia* Ihering, 1907
            ***Glycimeris* [sic] *camaronesia* Ihering, 1907**
          *Glycymeris cuevensis* (Ihering, 1897)
            ***Pectunculus pulvinatus* "var." *cuevensis* Ihering, 1897**
          *Glycymeris subtrigona* Ihering, 1907
            ***Glycimeris* [sic] *subtrigona* Ihering, 1907**

Order Mytiloida
      Superfamily Mytiloidea
        Family Mytilidae
          *Crenella camaronesia* (Ihering, 1907)
            ***Crenella divaricata camaronesia* Ihering, 1907**
          *Chloromya hauthali* (Ihering, 1907)
            ***Mytilus chorus* "var."** *hauthali* Ihering, 1907
          *Lithophaga patagonica* (d'Orbigny, 1846)
            ***Lithodomus patagonica* [sic] *dalli* Ihering, 1907**
          "*Modiola*" *rionegrensis* Ihering, 1903
          *Modiolus ameghinoi* (Ihering, 1897)
            ***Modiola ameghinoi* Ihering, 1897**
          ***Neoinoceramus ameghinoi* Ihering, 1902**

Order Pterioida
    Suborder Pteriina
      Superfamily Pterioidea
        Family Isognomonidae
          ***Perna quadrisulcata* Ihering, 1897**

    Suborder Pinnina
      Superfamily Pinnoidea
        Family Pinnidae
          *Atrina magellanica* (Ihering, 1899)
            ***Pinna semicostata* "var." *magellanica* Ihering, 1899**

Order Limoida
      Superfamily Limoidea
        Family Limidae
          ***Lima cossmanni* Ihering, 1907**
          ***Lima patagonica* Ihering, 1907**
          ***Lima pisum* Ihering, 1907**

Order Ostreoida
    Suborder Ostreina
      Superfamily Ostreoidea
        Family Ostreidae
          ***Exogyra callophyla* Ihering, 1903**
          *Exogyra guaranitica* (Ihering, 1899)

***Ostrea guaranitica* Ihering, 1899**

*Exogyra mendozana* Ihering, 1907

***Exogyra ostracina mendozana* Ihering, 1907**

***Ostrea ameghinoi* Ihering, 1902**

***Ostrea clarae* Ihering, 1907**

***Ostrea faira* Ihering, 1907**

*Ostrea hatcheri* Ortmann, 1897

***Ostrea percrassa* Ihering, 1897**

***Ostrea madryna* Ihering, 1907**

***Ostrea neuquena* Ihering, 1907**

***Ostrea hemisphaerica* [sic] "var." *capa* Ihering, 1907**

***Ostrea hemisphaerica*** [sic] "var." ***paca* Ihering, 1907**

***Ostrea orbignyi* Ihering, 1897**

***Ostrea rionegrensis* Ihering, 1903**

***Ostrea rocana* Ihering, 1903**

***Ostrea wilckensi* Ihering, 1907**

Family Gryphaeidae

***Gryphaea concors* Ihering, 1902**

*Gryphaea pyrotheriorum* (Ihering, 1897)

***Ostrea pyrotheriorum* Ihering, 1897**

*Odontogryphaea* Ihering, 1903

***Gryphaea (Odontogryphaea)* Ihering, 1903**

*Odontogryphaea rostrigera* (Ihering, 1902)

***Gryphaea concors* "var." *rostrigera* Ihering, 1902**

*Odontogryphaea rothi* (Böhm, 1903)

***Gryphaea rocana* Ihering, 1903**

Suborder Pectinina

Superfamily Pectinoidea

Family Pectinidae

*Chlamys* Röding, 1798

***Myochlamys* Ihering, 1907** [unnecessary replacement name; preoccupied]

***Chlamys (Zygochlamys)* Ihering, 1907**

*Chlamys centralis* Sowerby, 1846

***Myochlamys centralis* "var." *ameghinoi* Ihering, 1907**

*Chlamys deseadensis* (Ihering, 1907)

***Myochlamys deseadensis* Ihering, 1907**

*Chlamys eupatagonicus* (Ihering, 1907)

***Myochlamys eupatagonica* Ihering, 1907**

*Chlamys fissocostalis* (Ihering, 1899)

***Pecten fissocostalis* Ihering, 1899**

*Chlamys foyela* (Ihering, 1914)

***Myochlamys foyela* Ihering, 1914**

*Chlamys geminata* (Sowerby, 1846)

***Myochlamys geminata* "var." *radana* Ihering, 1907**

*Chlamys jorgensis* (Ihering, 1907)

***Pecten jorgensis* Ihering, 1907**

*Chlamys juliana* (Ihering, 1907)

***Myochlamys juliana* Ihering, 1907**

*Chlamys laziarina* (Ihering, 1907)
  ***Myochlamys laziarina* Ihering, 1907**
*Chlamys nodosoplicatus* (Ihering, 1897)
  ***Pecten nodosopiicatus* [sic] Ihering, 1897** [incorrect original spelling]
  ***Pecten nodosoplicatus* Ihering, 1897**
*Chlamys patagonensis* (d'Orbigny, 1842)
  ***Pecten patagonensis puntana* Ihering, 1907**
  ***Chlamys patagonensis* "var." *negroina* Ihering, 1907**
*Chlamys patagonensis portenia* (Ihering, 1907)
  ***Myochlamys patagonensis portenia* Ihering, 1907**
*Chlamys praenuncius* (Ihering, 1897)
  ***Chlamys espejoana* "Ihering" ex Ameghino, 1902** [*nomen nudum*]
  ***Pecten praenuncius* Ihering, 1897**
*Chlamys oblongus pyramidesium* (Ihering, 1907)
  ***Pecten oblongus pyramidesium* Ihering, 1907**
*Chlamys quemadensis* (Ihering, 1897)
  ***Pecten quemadensis* Ihering, 1897**
***Chlamys salamanca* Ihering, 1903**
***Pecten piconus* Ihering, 1907**

Family Propeamussiidae
*Amusium cossmanni* Ihering, 1907
  ***Amussium* [sic] *cossmanni* Ihering, 1907**

Superfamily Anomioidea
Family Anomiidae
***Pododesmus juliensis* Ihering, 1907**
***Pododesmus patagonensis* Ihering, 1907**
***Pododesmus paucisquamatus* Ihering, 1907**
***Pododesmus pazensis* Ihering, 1914**
***Pododesmus valchetanus* Ihering, 1907**

Subclass Paleoheterodonta
Order Unionoida
Superfamily Unionoidea
Family Hyriidae
***Diplodon colhuapensis* Ihering, 1903**
*Fossula derbyi* (Ihering, 1907)
  ***Diplodon derbyi* Ihering, 1907**
*Diplodon contortus* (Borchert, 1901), **new combination**
  ***Diplodon fraus* Ihering, 1907** [unnecessary replacement name]
*Diplodon delodontus* (Lamarck, 1819)
  ***Diplodon charruanus lujanensis* Ihering, 1907**
***Diplodon rothi* Ihering, 1904**

Subclass Heterodonta
Order Veneroida
Superfamily Lucinoidea
Family Lucinidae
***Fimbria* sp., Ihering, 1897** [unidentifiable]

*Lucina cruzialis* (Ihering, 1907)
**_Phacoides promaucana_ "var." _cruzialis_ Ihering, 1907**
*Lucina dalli* (Ihering, 1907)
**_Phacoides dalli_ Ihering, 1907**
*Lucina ortmanni* (Ihering, 1899)
**_Lucina ortmanni_ Ihering, 1899**
*Lucina rocana* (Ihering, 1907), **new combination**
**_Phacoides rocana_ Ihering, 1907**
*Miltha iheringiana* Doello-Jurado (1919)
**_Phacoides_ sp., Ihering, 1914**

Family Ungulinidae
*Diplodonta vilardeboaena* (d'Orbigny, 1846)
**Diplodonta _villardeboaena_ [sic] "var." camaronesia Ihering, 1907**

Superfamily Carditoidea
Family Carditidae
**_Cardita burckhardti_ Ihering, 1903**
**_Cardita palaeopatagonica_ Ihering, 1903**
*Carditamera plata* (Ihering, 1907)
**_Cardita plata_ Ihering, 1907**
**_Venericardia camaronesia_ Ihering, 1907**
**_Venericardia cannada_ Ihering, 1907**
**_Venericardia dalli_ Ihering, 1907**
*Venericardia iheringi* Böhm, 1903
**_Venericardia iheringi_ "var." _boehmi_ Ihering, 1907**
*Venericardia patagonica* (Sowerby, 1846)
**_Cardita pseudopatagonica_ Ihering, 1899**
**_Venericardia sulcolunularis_ Ihering, 1907**
**_Venericardia sulcolunularis freti_ Ihering, 1907**
**_Venericardia sylva_ Ihering, 1907**
**_Venericardia tehuelchana_ Ihering, 1907**
*Venericardia volckmanni* (Philippi, 1887)
**_Venericardia pueyrredona_ Ihering, 1907**

Superfamily Crassatelloidea
Family Crassatellidae
**_Crassinella dalli_ Ihering, 1907**
**_Crassatella kokeni_ Ihering, 1899**
**_Crassatellites patagonicus_ Ihering, 1907**
**_Crassatella longior_ Ihering, 1897**
*Crassatella suburbana* (Ihering, 1907)
**_Crassatellites suburbana_ Ihering, 1907**

Superfamily Cardioidea
Family Cardiidae
**_Cardium ameghinoi_ Ihering, 1907**
**_Cardium huttoni_ Ihering, 1907**
**_Cardium patagonicum_ Ihering, 1907**
**_Cardium philippii_ Ihering, 1897**
**_Cardium philippii pauciradiata_ Ihering, 1899**

- *Cardium jorgensis* Ihering, 1907, **new status**
  - ***Cardium pisum* "var." *jorgensis* Ihering, 1907**
- *Laevicardium santacruzense* (Ihering, 1914), **new combination**
  - ***Cardium santacruzense* Ihering, 1914**
- *Lahillia angulata* (Philippi, 1887)
  - ***Lahillia angulata patagonica* Ihering, 1907**
- *Trachycardium rocanum* (Ihering, 1907), **new combination**
  - ***Cardium (Hemicardium) rocanum* Ihering, 1907**

Superfamily Mactroidea
- Family Mactridae
  - *Mactra patagonica* d'Orbigny, 1846
    - ***Mactra indistincta* Ihering, 1897**
  - ***Mactra jorgea* Ihering, 1914**

- Family Mesodesmatidae
- ***Lutraria ameghinoi* Ihering, 1907**

Superfamily Solenoidea
- Family Solenidae
  - ***Solen crucis* Ihering, 1907**

Superfamily Tellinoidea
- Family Tellinidae
  - *Macoma santacruzensis* (Ihering, 1899)
    - ***Tellina santacruzensis* Ihering, 1899**
  - ***Tellina burmeisteri* Ihering, 1907**
  - ***Tellina gibber* Ihering, 1907**
  - ***Tellina jeguaensis* Ihering, 1897**
  - ***Tellina patagonica* Ihering, 1897**
    - ***Tellina patagonica* "var." *camaronesia* Ihering, 1907**

- Family Semelidae
  - *Abra uruguayensis* (Pilsbry, 1879)
    - ***Abra patagonica* Ihering, 1907**

- Family Psammobiidae
  - *Gari burmeisteri* (Ihering, 1907)
    - ***Psammobia burmeisteri* Ihering, 1907**
  - *Gari guassu* (Ihering, 1907)
    - ***Psammobia guassus* [sic] Ihering, 1907**
  - *Gari tehuelcha* (Ihering, 1907)
    - ***Psammobia tehuelcha* Ihering, 1907**
  - *Psammotella perplana* (Ihering, 1897)
    - ***Tellina perplana* Ihering, 1897**
  - *Sanguinolaria tehuelcha* (Ihering, 1899)
    - ***Tellina ortmanni* Ihering, 1907**
    - ***Tellina tehuelcha* Ihering, 1899**
  - *Tagelus plebeius* (Solander, 1823)
    - ***Tagelus gibbus entrerianus* Ihering, 1907**
  - *Solecurtus platensis* d'Orbigny, 1846

Superfamily Gaimardioidea
  Family Gaimardiidae
    *Gaimardia prisca* (Ihering, 1907)
      ***Modiolarca prisca* Ihering, 1907**

Superfamily Corbiculoidea
  Family Corbiculidae
    *Eriphyla sehuena* (Ihering, 1907)
      ***Corbula sehuena* Ihering, 1907**
    ***Corbicula (Corbiculella)* Ihering, 1907**
    *Corbicula (Corbiculella) tenuis* Ihering, 1907
      ***Corbicula tenuis* Ihering, 1907**
    *Cyanocyclas salobris* (Ihering, 1907)
      ***Cyrena salobris* Ihering, 1907**

Superfamily Veneroidea
  Family Veneridae
    *Amiantis arenophila* (Ihering, 1907)
      ***Macrocallista arenophila* Ihering, 1907**
    ***Amiantis laziarina* Ihering, 1907**
    ***Anomalocardia entreriana* Ihering, 1907**
    ***Chione eupyga* Ihering, 1907**
    ***Chione pampeana* Ihering, 1907**
    **"*Cytherea*" *chalcedonica* Ihering, 1903**
    ***Dosinia burckhardti* Ihering, 1907**
    *Dosinia (Dosinella) burmeisteri* (Ihering, 1907)
      ***Dosinia burmeisteri* Ihering, 1907**
    ***Dosinia meridionalis* Ihering, 1897**
    ***Dosinia entreriana* Ihering, 1907**
    *Macrocallista iheringi* (Cossmann, 1895)
      ***Cytherea splendida* Ihering, 1897**
    ***Pitar julianum* Ihering, 1907**
    ***Pitar lahillei* Ihering, 1907**
    *Pitar rostrata* (Koch, 1844)
      ***Pitar lahillei ortmanni* Ihering, 1907**
    *Protothaca* Dall, 1902
      ***Chione (Ameghinomya)* Ihering, 1907**
    *Protothaca antiqua* (King, 1832)
      ***Chione casa* Ihering, 1907**
      ***Chione vindex* Ihering, 1907**
    *Protothaca argentina* (Ihering, 1897)
      ***Venus volckmanni* "var." *argentina* Ihering, 1897**
      *Venus paranensis* Borchert, 1901
    *Protothaca cossmanni* (Ihering, 1907)
      ***Chione cossmanni* Ihering, 1907**
    *Samarangia navidadis* (Philippi, 1887)
      ***Marcia ortmanni* Ihering, 1907**
    *Samarangia exalbida* (Chemnitz, 1795)
      ***Venus striatolamellata* Ihering, 1897**
      ***Marcia rada* Ihering, 1914**
      ***Marcia scutata tehuelcha* Ihering, 1914**

*Samarangia scutata* (Ihering, 1907)
  ***Marcia scutata* Ihering, 1907**

Order Myoida
  Suborder Myina
    Superfamily Myoidea
      Family Corbulidae
        *Corbula hatcheri* Ortmann, 1900
          ***Corbula pulchella juliana* Ihering, 1907**
        ***Corbula pseudopatagonica* Ihering, 1907**

    Superfamily Hiatelloidea
      Family Hiatellidae
        *Panopea bagualesia* Ihering, 1907
          ***Panopaea* [sic] *bagualesia* Ihering, 1907**
        *Panopea nucleus* (Ihering, 1899)
          ***Glycimeris* [sic] *nucleus* Ihering, 1899**
          ***Panopaea* [sic] *nucleus elongata* Ihering, 1914**
        *Panopea panis* Ihering, 1907
          ***Panopaea* [sic] *panis* Ihering, 1907**
        *Panopea quemadensis* (Ihering, 1897)
          ***Glycimeris* [sic] *quemadensis* Ihering, 1897**
          ***Panopaea* [sic] *sierrana* Ihering, 1907**
        *Panopea thomasi* Ihering, 1914
          ***Panopaea* [sic] *thomasi* Ihering, 1914**

    Superfamily Pholadoidea
      Family Pholadidae
        *Cyrtopleura lanceolata* (d'Orbigny, 1846)
          ***Barnea* sp., Ihering, 1914**
        ***Barnea saxicava* Ihering, 1907**
        *Netastoma paucispina* (Ihering, 1897), **new combination**
          ***Pholas paucispina* Ihering, 1897**

Class Scaphopoda
  Order Dentaliida
      Family Dentaliidae
        ***Dentalium sulcosum* "var." *juliana* Ihering, 1907**
        ***Dentalium matanzasense* Ihering, 1907**
        *Dentalium octocostellatum* Pilsbry and Sharp, 1898
          ***Dentalium octocostatum* Ihering, 1897** [preoccupied name]

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